

Learning Styles, Language Learning Strategies and Fields of Study among ESL Learners

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ABSTRACT

Studies show learners usually exhibit marked improvement in performance if the teaching skills are matched with their learning style preferences. Researchers have also indicated that learning strategy is an important aspect in the learning process. However, only a few studies have explored the relationship between learning styles and learning strategies. This study aims to identify the preferred perceptual learning styles (PLS) and language learning strategies (LLSs) of English for Specific Purposes (ESP) learners. This investigation is carried out based on the learners' fields of study (Management and Communication). Data were collected from a sample of 50 participants. Their PLS and LLSs were examined from the Perceptual Learning Style Preference Questionnaire (PLSPQ) by Reid (1984) and the Strategy Inventory Language Learning (SILL) by Oxford (1990). It was found that most learners are auditory and kinaesthetic learners. The findings also show a meaningful correlation between auditory learning style and social strategies. A significant match was discovered between learners' preferred learning styles and strategies with their academic majors. It is hoped that the results of this research will assist academicians in preparing appropriate lesson plans for the students.

KEYWORDS: perceptual learning styles, language learning strategies, English for Specific Purposes

Introduction

Currently, educators worldwide are shifting from a teacher-centred paradigm to a student-centred instruction. Research reveals that the process of learning varies from one individual to another because of the occurrence of biological and psychological disparities. Each person learns in his or her own particular way or style based on his or her backgrounds, capabilities, weaknesses, wants, characteristics, motivations and strategies towards learning (Al-Hebaishi, 2012; Reiff, 1992). This inevitably leads to the use of cognitive styles, learning styles and learning strategies of an individual in learning a language (Zhou, 2004).

It is evident from the research to date that learners are most likely to use their own preferred methods of learning, as long as they could enjoy using them to gain knowledge. Researchers agree that successful learning is determined by the utilisation of suitable learning styles and strategies, as well as the extent to which learners respond to and benefit from educators in a successful manner (Abdolmehdi Riazi, 2007; Al-Hebaishi, 2012; Felder, 1995; Oxford & Ehrman 1993; Reid, 1987).

Learning style (LS) is defined as learners' preferred ways of acquiring information or knowledge, whereas learning strategy refers to the techniques that are used to gain knowledge (Honey & Mumford, 1992; Kolb, 1984; Oxford, 1990). Therefore, it is important for both educators and learners to understand these individual differences to produce active learners.

According to Chiya (2003), teachers must be attentive to students' learning styles and introduce, and expose them to suitable learning strategies for successful learning takes place in the classroom. Brown (1994) also states that the match of teaching and learning styles develops learners' momentum to achieve in their academic line. This necessitates understanding the importance of these preferences in the teaching and learning process. Chiya (2003) and Al-Hebaishi (2012) state that knowing the positive impact of learning styles and strategies towards learners, many educators have started to develop good lesson plans and teaching methods that suit the learners' preferences. Researchers in this field also have identified that learners' choice of learning strategies is significantly influenced by their preferred learning styles (Wen & Johnson, 1997). Nevertheless, there is a dearth of studies conducted up to now on the correlation between ESL learners' perceptual learning styles and language learning strategies in the Malaysian context. Therefore, this study investigates learners' preferred perceptual learning styles (PLS) and language learning strategies (LLS), and also attempts to determine if learners' academic majors affect their choice of PLS and LLS.

Background of the study

In Malaysia, English is taught as a second language in both primary and secondary schools, as a mandatory subject. Students who wish to continue studying at Malaysian universities must take Malaysian University English Test (MUET), which is an English proficiency assessment (Malaysian Examination Council, 2006). Local undergraduates generally have to take relevant English proficiency courses based on their scores obtained in MUET.

Several researchers indicate that most learners at Malaysian universities lack comprehensive knowledge of vocabulary and complex sentences, and contend that learners' limited knowledge and understanding of vocabulary could affect learners' reading comprehension skills (Tanveer, 2007; Nambiar, 2007). A study by Mohamed Ismail, Ahamad Shah and Normala Othman (2006), indicates that the instructors in communication classes tend to use more comprehension check questions than two-way conversations. This shows learners are not given ample opportunities to interact with one another, and the scenario gets worse when the students become increasingly beleaguered by anxieties about the language. In addition, Noor Hashimah Abdul Aziz (2007) states that most of the Malaysian ESL learners at the tertiary level feel nervous when they speak in English, and they also face several difficulties in expressing their ideas in English.

Furthermore, Mohini Mohamed, Aziz Nordin and Rosnani Hashim (2008) and Munir Shuib (2008) state that Malaysian students' English language proficiency is quite poor. One of the causes of this problem is that educators use a teacher-centred approach in the classroom, where students look upon a teacher as the person who tells them what to do and what not to do (Fauziah Ahmad, Parilah Mohd Shah and Samsuddeen Abdul Aziz, 2005). In the long run, students may become passive and rely on teachers completely during the learning process. Fauziah, Parilah and Samsuddeen (2005) also indicate that the continuation of a teacher-centred learning approach in a classroom may produce more dependent learners instead of independent ones. Studies have shown that the learning process environment in Malaysia has shifted from a teacher-centred paradigm to a student-centred learning approach (SCLA) especially at tertiary institutions (Fauziah, Parilah, & Samsuddeen, 2005; Kaur, 2003).

According to Kaur (2003), the practice of SCLA in the classroom can produce positive learning experience as the learners can construct and perceive knowledge on their own. Hence, students will tend to take responsibility for their learning process if they are actively involved in classroom activities like role play and discussion. She also states that classroom activities should complement students' preferences, and that this is essential as it will draw teachers' attention towards learners' preferred learning styles and strategies.

In relation to this, Nunan (1989) and Al-Hebaishi (2012) concur that educators should be aware of learners' needs, references, goals and capabilities in order to design student-centred instructional plans. In addition, several studies have shown that learners tend to perform well if teachers' teaching skills match learners' needs (O'Brien, 1989; Oxford & Ehrman, 1993).

In this study, the preferred PLS and LLS of 50 undergraduates who took English for Business Communication course (LSP 403) were examined. This course is a mandatory course for undergraduates from the School of Communication and the School of Management at Universiti Sains Malaysia (USM). Assessment of this course comprises two components: continuous coursework (50%) and final examination (50%). The participants for this study fall in the 21-23 age category, and took the course in the first semester of the 2014/2015 academic session.

Objectives of the study

This research is to study ESL learners' preferred PLS and LLS from two different fields of study (Management and Communication) in learning English for Business Communication. The followings are the research questions of this study:

1. Which perceptual learning styles do Management and Communication students at Universiti Sains Malaysia (USM) use in learning English for Business Communication Course?
2. What are the strategies most frequently used by these Management and Communication students when learning English for Business Communication course?
3. Are there any significant correlations between learners' preferred perceptual learning style, language learning strategies and fields of study in learning English for Business Communication?

Significance of the study

In this study, the researchers have been cognizant from the outset of learners' PLS and LLSs preferences. This awareness can help teachers create effective lesson plans that include using various teaching methods or materials in order to engage the learners in meaningful classroom activities that would accommodate their needs for successful learning.

This study will have significant implications for the learners. Understanding students' preferred perceptual learning styles and strategies will help teachers identify their strengths and weaknesses since language learning would have gravitated from a teacher-centred approach to SCLA. This insight will assist learners in planning their learning strategies and make their learning more meaningful and interesting. According to Nor Hidayah Ramli and Noor Mala Ibrahim (2010), if teachers know the goals of learning styles and strategies in the learning environment, they could eventually develop learners' self-esteem, motivation and confidence. In addition, Fazarro and Martin (2004) state that learners tend to have similar learning styles if they have the same major or fields of study. In this way, it would be significant if the researchers identify the influence of learners' academic majors towards their choice of learning styles and strategies. The match between learners' preferred PLS and LLSs and their major fields of study could help syllabus designers and textbook producers incorporate suitable exercises, topics and texts for the learners.

Literature review

Studies on perceptual learning styles

Kolb (1984) and Honey and Mumford (1992) define learning style as learners' favourite ways of acquiring information. Learning styles vary from one individual to another, and each learner has a unique learning style (Reid, 1995). Reid (1987) states that a student's learning style encompasses several unconscious attributes like comprehension, clarification, retrievability and retainment of new knowledge. She classified learners' learning styles into six (6) elements namely visual, auditory, tactile, kinaesthetic, group or individual.

Visual learners usually learn best from seeing pictures, posters, movies and images. They prefer to take notes and observe teachers' gestures in order to understand the message conveyed to them. Auditory learners obtain information via listening and they prefer classroom activities like role-play and discussion. Most students in this group of learners are talkative and memory-oriented. Kinaesthetic learners (movement-oriented) who enjoy physical action like drama and role-play, usually learn best from personal experiences whereas tactile learners (touch-oriented) prefer hands-on activities. Group learners like class interaction while individual learners love to study alone or handle work independently.

Reid (1987) conducted a comprehensive study on PLS preferences of non-native speakers (NNSs) of English attending American colleges. Her findings show that ESL learners in her study favoured kinaesthetic and tactile learning styles. She also found that the dependent variables like language background, gender, age and others differ significantly in their relationship to learners' major preferences of the perceptual learning style. In another study, Peacock (2001) conducted a research on learning and teaching styles based on Reid's two major hypotheses. In his study, 206 EFL learners and 46 EFL educators at a Hong Kong university were interviewed and given Reid's Perceptual Learning Style Questionnaire (PLSPQ). Based on the study, he found most learners preferred kinaesthetic and auditory styles, and are not in favour of group and individual styles, whereas educators favoured kinaesthetic, auditory and group. His findings also confirmed Reid's first hypothesis that learners have their own learning styles, strengths and weaknesses. The results also match Reid's second assumption that failure of delivering information based on learners' learning styles leads to incompetency, disappointment, and demoralization among the learners (Peacock, 2001).

A number of studies have been carried out on PLS preferences among Malaysian students. For example, Ong, Rajendram and Mohd. Suffian Md. Yusof (2006) investigated the relationship between students' written English proficiency and their preferred learning styles. They asked TESL students at a teacher training institute to complete the PLSPQ. They found that most of the learners favoured a kinaesthetic style. Similar findings were reported by Mulalic, Parilah Mohd Shah and Fauziah Ahmad (2009) who conducted a study at a private university in Malaysia. They asked 160 respondents to answer the PLSPQ research instrument. Their findings showed that the majority of the respondents preferred a kinaesthetic learning style, and were reported to have minor predilection for visual, auditory, and group. The findings also revealed that male learners favoured kinaesthetic and auditory learning styles more than the female learners. Furthermore, they found the existence of meaningful correlations between learners' perceptual learning styles and their ethnicity. Chinese and Malay students favoured the kinaesthetic style, whereas Indians preferred visual, auditory and individual learning. They also found that Chinese students preferred using group learning as their major learning style preference (Mulalic, Parilah, & Fauziah, 2009).

Mimi Mohaffyza Mohamad and Muhammad Rashid Rajuddin (2010) who examined 48 ESL Engineering undergraduates' preferred PLS based on their gender and specific fields of study using the PLSPQ, also found that most of them were kinaesthetic learners. Visual and kinaesthetic learning styles were reported as major learning styles for male students, while females favoured the auditory style. They also discovered that Mechanical and Civil Engineering

students preferred visual and kinaesthetic learning styles, whereas Electrical Engineering students preferred auditory learning.

In general, it is interesting to note that variables like learners' language background, ethnicity, gender and field of study can affect learners' PLS preferences. Past research has shown that most ESL learners select kinaesthetic and auditory learning styles as their main preferences. Male learners also appear to prefer the kinaesthetic style whereas female learners have a tendency to use the auditory learning style. Hence, it is wise for both educators and learners to have sufficient knowledge regarding learners' PLS to produce teaching which can lead to a successful learning process.

Studies on language learning strategies

LLSs have been investigated extensively since the 1970s (Nambiar, 2009). In the 1990s, most of the studies focused on how factors like learners' competency, learning atmosphere, race, age, gender, learning styles, encouragement and belief affect their choice of learning strategies. According to Oxford (1990) LLSs refer to the methods that the learners utilize to develop new knowledge so that it is transformed into a more effective and enjoyable experience, and those who use appropriate learning strategies do become independent, creative and dynamic. Oxford (1990, p. 8) classifies LLS according to six categories namely memory, cognitive, compensation, meta-cognitive, affective and social. She designed the Strategy Inventory for Language Learning (SILL) that consists of those six strategies. Chang (2011) indicates that Oxford's classification of LLS is considered the most comprehensive system to date. This inventory has been used throughout the world extensively to collect data for numerous studies.

Oxford (1990) says that learners who use the memory strategy frequently prefer to learn through the use of imagery and grouping as this can assist them to recall information. On the other hand, learners who prefer the cognitive strategy like taking notes, practicing and analysing the information they have received. Meanwhile, learners who opt for the compensation strategy usually use guessing and rephrasing strategies to become acquainted with the new information. In contrast, meta-cognitive users favour activities like self-monitoring, focusing and planning for a task or project because these activities help them recall, analyse and synthesize the knowledge they have obtained. The affective strategy refers to self-encouragement as it assists learners to manage their emotions and attitudes in an optimal manner. Learners who use the social strategy enjoy communicating with their peers and interacting with others in a dynamic manner.

Much of the researches on LLSs are related to learners' proficiency. Dreyer and Oxford (1996) administered a study among university ESL majors who speak Afrikaans. They report a meaningful relationship between learners' learning strategy and their proficiency. They further explain that proficient learners use cognitive, compensation and meta-cognitive more frequently than the weak students. Conversely, they indicate that learners who are not proficient use the social strategy frequently.

In the Malaysian context, Kayad (1999) conducted a study on learners' proficiency and their learning strategies among undergraduates. The findings show that high competent learners were inclined to use cognitive strategies more than those with low proficiency in the language. This

result is similar to Nambiar's (1996) findings that the learners' manipulation of learning strategies differ based on their proficiency levels. She conducted a study on six undergraduates and investigated the use of their learning strategies when carrying out language activities. She found that low proficiency learners use compensation and social strategies to a greater extent than advanced learners.

Besides language proficiency, many researchers (Green, 1992; Noguchi, 1991; Green & Oxford, 1993 cited in Nambiar, 1996) also found a significant relationship between gender and LLSs. They reported that the frequency of using language strategies is higher among female learners compared to males. In addition, Kamarul Shukri, Mohamed Amin Embi, Nik Mohd Rahimi, Zamri Mahamod (2009) found that female learners tend to use affective and metacognitive strategies more compared to the male students. In terms of cultural backgrounds, Abdolmehdi Riazi (2007) did not find any relationship between learners' cultural background and their LLS. Overall, he found that most learners have a preference for compensation, cognitive and metacognitive strategies than the other types of strategies. A meaningful correlation between motivation and LLS has also been identified by Kamarul Shukri et al (2009). They have noticed that students with high stimulation tend to use learning strategies frequently. However, research on learners' LLS and their majors are yet to be explored.

Studies on learning styles and learning strategies

Many researchers distinguish between learning styles and strategies. Learning style is defined as internally-based characteristics, in which learners usually use unconsciously, whereas the latter is known as external-based skills, which refer to the fact that learners are cognizant of the techniques that can be used to maximize learning. Oxford (1990) states that learning style is an intuitive or involuntary notion - thus it is hard to change a person's learning style compared to learning strategy, which is more adaptable. She further explains that learners use LLS based on their goals, intentions and purposes compared to learning styles. She also indicates that learners' PLS preferences influence their choice of their suitable learning strategies in the teaching and learning environment.

Al-Hebaishi (2012) conducted a study on Taibah University's female EFL majors using the Language Learning Style Questionnaire and SILL on eighty-eight (88) participants. He states that the majority of the respondents preferred a visual learning style and their major preference for learning strategies were memory and affective strategies. Rossi-Le (1989) investigated learners' dominant perceptual learning styles, and the strategies that they employ in learning ESL based on the learners' backgrounds. She administered the PLSPQ and SILL tests to 147 adult immigrants in the United States, which mostly consisted of Chinese, Laotian, Vietnamese and Spanish speaking people. The results show that most learners favoured tactile and kinaesthetic learning styles. She also identified a meaningful correlation between ESL learners' learning styles and strategies. Most visual students used the visualization strategy whereas those who preferred learning in a group favour the social strategy in the process of learning.

In Malaysia, Nor Aniza Ahmad, Zalizan Mohd Jelas and Manisah Mohd Ali (2010) who examined the match of learning styles, learning strategies and academic performance of

secondary school students with regard to their gender and type of schools, (single-gender or coeducational school) found a positive correlation between students' learning styles and their achievement in single-gender schools. They distributed an adapted version of the Learning Styles Analysis (LSA) and language learning strategies questionnaire to 400 fifteen year-old students, and found positive influence of learning styles toward the males' learning strategies.

Learning styles and strategies based on field of study

Research suggests that learners' learning style preferences are based on their academic majors (Fazzaro & Martin, 2004). Their study showed that learners from the same majors are likely to have similar learning styles. For instance, Luu's (2011) study on 172 EFL learners showed that those who are English, Accounting and Banking and Finance majors prefer the kinaesthetic learning style. Their study investigated the variables like learners' academic majors, length of studying higher education, gender, age, experiences of learning language, and competency of English language that affect their choice of respective preferred learning styles.

A study on the influence of learners' gender and academic majors towards their learning style showed that most finance majors favoured diverging style as they are able to learn through visualisation (Wei, Hoo & See, 2011). This study was investigated finance, Computer Science and English majors based on Kolb's learning style model. On the other hand, Computer Science majors favoured the converging style because they are interested in experimenting, solving problems and carrying out hands-on activities. Students majoring in English are more likely to embrace an accommodating style as they enjoy group work and class discussion. Thus, they concluded a significant match occurs between learners' preferred learning styles and their fields of study. Peacock and Ho (2003) also derived similar findings in their study on LLS among 1006 EAP (English for Academic Purposes) students. They administered the study on Housing and Building, Management, Computer Science, Mathematics, Engineering, Social Science, English, and Education. The findings of this study showed that Arts majors (Social Science, English, and Education) tend to employ creative, innovative and dynamic strategies than the Engineering and Science students. In another study, Rong (1999) reported that students who are English majors use cognitive, compensation, affective, and social strategies to a great degree than science majors. Rong (1999) administered the questionnaire on 265 third year Science, Arts and English majors in universities across China to study the use of LLS.

In a recent study, Rao and Liu (2010) conducted a study between learners' LLS and field of study. The respondents of this study were Social Science and Science major students, and they were requested to write a diary for four weeks. The data were analysed based on Bigg's learning model. The results of this research show that social Science students use visual/spatial in the learning process, whereas the Science students use logical analysis. Past research has shown that students who major in Social Science preferred hands-on and practical approaches (Luu, 2011; Wei, Hoo, & See, 2011). They learn best through interaction, class discussion and role play. Studies have also shown that different ways of manipulating strategy use occur among learners from different disciplines. For example, English and Social Science majors use the most number of strategies compared to Engineering and Science students (Peacock & Ho, 2003; Rao & Liu, 2010; Rong, 1999).

In short, many researchers have investigated how variables like learners' proficiency, ethnicity, gender, learning environment, academic achievement and academic majors affect the learners' choice of LS and LLS. Most studies on PLS show that most ESL students are kinaesthetic (Reid, 1987; Peacock, 2011; Ong, Rajendram and Mohd. Suffian, 2006; Mimi Mohaffyza & Muhammad, 2010). In relation to LLS, most ESL learners use all the six strategies in the learning process, but at different frequency levels (Dreyer & Oxford, 1996; Kayad, 1999; Nambiar, 1996). Recent studies on learners' learning strategies and fields of study show that most ESL learners, especially from arts based majors prefer cognitive and social strategies (Peacock & Ho, 2003; Rong, 1999; Rao & Liu (2010).

In Malaysia, the investigation on the interrelationship between PLS and LLSs have yet to be studied extensively. The same applies for studies on the connection between learners' LS, LLSs and academic majors. Given this gap, it was felt that there was a necessity to investigate the relation between PLS and LLSs, and how learners' fields of study affect their choice of LS and LLSs.

Methodology

Subject

Respondents of this research were undergraduates (second and final year students) who obtained MUET Band 5 or passed in Academic English (LSP300). The participants were from the School of Management and School of Communication who took the Business and Communication English course (LSP403) in Semester 1 of the 2014/2015 academic session. The School of Management offers various specialisations like finance, accounting, business, management and organisational behaviour. This group of students need to obtain a total 136 credit units. Undergraduates have to complete four units of English (university course) based on their MUET results. If they have passed the MUET examination with a Band 4, they are required to take LSP300 first, and then the relevant higher level course, LSP403. However, if they have obtained a Band 5, then they are required to take LSP403 and one of the advanced level ESP courses, namely Academic Writing, Business Writing, Creative Writing, English for Pronunciation, Spoken English, and English for Translation. Those who have obtained a Band 6 can take any two of the ESP courses. The School of Communication offers three areas of specialisation; persuasive communication, journalism and film and broadcasting. In order to graduate, undergraduates from this school need to obtain 105 credit units. The requirements of taking English language courses are the same for the School of Management, where four units of English must be taken in order to graduate.

In this study, 25 students from the School of Management and another 25 students from the School of Communication were asked to complete the Perceptual Learning Style Questionnaire (PLSPQ) and SILL for data collection. The respondents of the study were selected based on convenience sampling method. Table 1 shows the respondents' demographic background.

Table 1: The distribution of the participants by fields of study

Profile	Major	Management	Communication
Age	19-20	0	2
	21-23	25	23
Gender	Male	12	10
	Female	13	15
Ethnicity	Malay	13	12
	Chinese	9	5
	Indian	3	8

Table 1 shows that 96% of the participants were between the ages of 21 and 23, and only 4% were from the 19 - 20 age group. For the School of Management, 48% of the respondents were male while 52% were female learners. However, for the School of Communication, 40% of the respondents were male and 60% of the respondents were female. There were 52% of Malays, followed by Chinese, 36% and only 12% of Indians from the School of Management. On the other hand, there were 48% of Malays, followed by Indians, 32% and Chinese, 20% from the School of Communication.

Instruments

The first instrument was the self-assessment questionnaire - PLSPQ designed by Reid (1987). It was used to identify the respondents' preferred PLS. Abdolmehdi Riazi & Mansoorian (2008) and Peacock (2001) confirm that this questionnaire is valid and reliable to use for research purposes. It consists of five statements for each preference: visual, auditory, tactile, kinaesthetic, group learning and individual learning (Reid, 1987). Reid (1987) classifies learners' learning style preferences into major, minor and negative learning categories.

The second instrument, SILL which was designed by Oxford (1990) was used to investigate the subjects' preferred LLSs. The questionnaire comprises 50 items, which is categorised into six strategies: memory, cognitive, compensation, metacognitive, affective and social. The Cronbach Alpha reliability coefficients were 0.78 for PLSPQ and 0.80 for SILL.

Data analysis

The data obtained from PLSPQ and SILL is analysed using descriptive statistics. Pearson correlation and One Way ANOVA test were used to investigate the significant correlation that might occur between learners' PLS and LLSs with their major fields of study.

Findings

Perceptual learning style preferences of Management and Communication students in the Business and Communication English Course

Table 2 shows the descriptive statistics of ESL learners' preferred PLS. Most ESL learners from both Management and Communication majors prefer the kinaesthetic and auditory (M = 3.88)

learning styles. The results confirm the findings of Al-Khatani's study (2011, cited in Al-Hebaishi, 2012), which show that most Saudi ESL learners favoured kinaesthetic and auditory followed by the visual style. The finding is also consistent with Reid's study (1987) who found that the kinaesthetic style was the most preferred learning style. Interestingly, the results of this study also align with Luu's (2011) findings which show that management students specialising in accounting and finance selected the kinaesthetic style (hands-on or experimenting activities) as their major preference. However, Wei, Hoo and See (2011) indicate that management students, especially finance majors, prefer the diverging learning style, through which they gather information and learn via visualisation and imagination.

Table 2: Descriptive statistics of learning style preferences

	Minimum	Maximum	Sum	Mean	Std. Deviation	Rank
Visual	2.00	4.80	185.20	3.7040	.52875	3
Tactile	2.20	4.60	180.40	3.6080	.60738	5
Auditory	3.00	5.00	193.80	3.8760	.45516	1
Kinaesthetic	2.60	5.00	193.80	3.8760	.53435	2
Group	2.00	4.80	182.00	3.6400	.69400	4
Individual	2.00	5.00	168.80	3.3760	.68050	6

The means in Table 2 show that there are not too many variations among the ranks of these six types of learning styles from the respondents in this study. The main difference lies in the frequencies of using these learning styles by ESL learners. The auditory learning style is ranked first among all the learning styles followed by the kinaesthetic style. The individual style becomes the least preferred category. Similarly, Peacock (2001) indicates that most ESL learners favour the kinaesthetic and auditory, and have negative preference on the individual learning style. Many studies in the Malaysian context reveal that most learners prefer the kinaesthetic and auditory styles as their major learning styles preference (Ong, Rajendram and Mohd. Suffian, 2006; Mulalic, Parilah, & Fauziah, 2009; Muhammad & Rajuddin, 2010) in learning language. It is quite evident that most ESL learners like excursion and problem solving activities.

Language learning strategies used by Management and Communication students in the Business and Communication English Course

Table 3 displays the descriptive statistics of six learning strategies. The strategies most frequently employed by the respondents in this study are metacognitive and cognitive ($M = 3.2533$ and $M = 3.2529$ respectively). These findings of this study are in tandem with the results provided by Al-Hebaishi (2012), and Dreyer and Oxford (1996).

Table 3: Descriptive statistics of Language Learning Strategies

Learning Strategies	Sum	Mean	Std. Deviation	Rank
Memory	161.00	3.2200	.57516	4
Cognitive	162.64	3.2529	.53690	2
Compensation	161.50	3.2300	.73686	3
Metacognitive	162.67	3.2533	.76059	1
Affective	143.50	2.8700	.93514	6
Social	158.17	3.1633	.71229	5

The results also reveal that the affective learning strategy is rated the least preferred strategy (means = 2.87) by the students in this study. This finding is in concurrence with Al-Hebaishi's (2012) findings that social and affective strategies are the least favoured strategies among ESL learners. This may explain that ESL learners prefer activities that assist them in processing information through note-taking or practising (cognitive). They are also good in managing acquired information via setting goals and carrying out self-evaluation.

Learners' perceptual learning style and language learning strategies preferences

Table 4 shows the analysis of the Pearson correlation between PLS and LLS. The results show a significant difference in the memory, compensation, metacognitive and affective strategies that are used by the visual learners ($F = -.289, -.333, -.242$ & $-.341$ respectively, $p < .05$). This explains why visual learners in this study utilize most of the strategies compared to learners who prefer other perceptual learning styles. This result is consistent with Al Hebaishi (2012) who reported that visual learners preferred to use memory and affective strategies in learning language. Such learners tend to apply or create images and sounds to store information that they receive from reading or hearing. This acquired information is stored in long-term memory through pictures or diagrams that help the learners retrieve or recall it.

Table 4: Correlation coefficient between Perceptual Learning Styles and Language Learning Strategies

Learning Styles		Memory	Cognitive	Compen.	Meta	Affective	Social
Visual	Pearson Correlation	-.289*	-.168	-.333**	-.242*	-.341**	-.234
	Sig. (1-tailed)	.021	.121	.009	.045	.008	.051
	N	50	50	50	50	50	50
Tactile	Pearson Correlation	.104	-.061	.268*	.057	.132	-.053
	Sig. (1-tailed)	.236	.337	.030	.346	.180	.356
	N	50	50	50	50	50	50
Auditory	Pearson Correlation	.155	.024	.083	.036	.064	.248*
	Sig. (1-tailed)	.141	.436	.284	.401	.330	.041
	N	50	50	50	50	50	50
Kinaesthetic	Pearson Correlation	.024	-.233	-.004	-.161	.056	-.048
	Sig. (1-tailed)	.434	.052	.489	.132	.351	.371
	N	50	50	50	50	50	50
Group	Pearson Correlation	.100	-.113	.107	.080	.292*	.020
	Sig. (1-tailed)	.244	.217	.230	.290	.020	.446
	N	50	50	50	50	50	50
Individual	Pearson Correlation	.087	-.185	-.105	.035	-.064	.163
	Sig. (1-tailed)	.275	.099	.233	.405	.330	.130
	N	50	50	50	50	50	50

** Correlation is significant at the 0.01 level (1-tailed).

* Correlation is significant at the 0.05 level (1-tailed).

The findings reveal that visual learners preferred using compensation strategies like guessing and rephrasing to get new information. Visual learners are able to pay attention to lessons and monitor themselves (metacognitive) during the learning process, which could also lead to self-encouragement and a positive attitude (affective) towards learning. Al-Hebaishi also found that visual learners use the affective strategy frequently. Another researcher, Woolridge (1978 cited

in Al-Hebaishi, 2012) explains that visual learners are sensitive, and their sentimental attitude play important part in the learning process.

The current study also found a meaningful correlation is present between tactile learners and compensation strategy ($r = .268, p < .05$). However, the analysis shows that the difference of the tactile style with respect to other language learning strategies is not significant. These learners who enjoy hands-on activities prefer to use new information despite the existence of knowledge gaps. They use approaches like guessing, rephrasing and using gestures in the process of learning.

The results also shows that learners who learn in a group prefer the affective strategy ($r = .292, p < .05$) than any other learning strategies. Contrary to this, Rossi-Le (2011) states that group learners favour the social strategy the most. However, the results of the present study shows that the social strategy is to be found the most preferred one by auditory learners ($r = .248, p < .05$). There was no meaningful correlation between the kinaesthetic and individual learners with LLSs.

Besides investigating the relationship between PLS and LLSs, the correlation between learners' PLS and their major fields of study was also examined. Table 5 displays the One Way ANOVA Test on ESL learners' PLS based on their fields of study. The result indicates that learners who use the tactile strategy as their major learning style preference have a meaningful relationship with their fields of study at a significance value of $p < 0.05$. However, visual, auditory, kinaesthetic, group and individual learning styles show no significant differences with learners' fields of study ($F = .556, .095, 3.187, .163, 2.298$ respectively, $p > .05$). As shown in the Table 5, there are no statistically significant differences in the use of PLS by students from different fields of study except for the tactile category ($p < .05$). This prompted further investigation between learners' PLS and fields of study.

Table 5: One way ANOVA on ESL Perceptual Learning Styles based on learners' fields of study

		Sum of Squares	Df	Mean Square	F	Sig.
Visual	Between Groups	.157	1	.157	.556	.460
	Within Groups	13.542	48	.282		
	Total	13.699	49			
Tactile	Between Groups	1.411	1	1.411	4.065	.049
	Within Groups	16.666	48	.347		
	Total	18.077	49			
Auditory	Between Groups	.020	1	.020	.095	.760
	Within Groups	10.131	48	.211		
	Total	10.151	49			
Kinaesthetic	Between Groups	.871	1	.871	3.187	.081
	Within Groups	13.120	48	.273		
	Total	13.991	49			
Group	Between Groups	.080	1	.080	.163	.688
	Within Groups	23.520	48	.490		
	Total	23.600	49			
Individual	Between Groups	1.037	1	1.037	2.298	.136
	Within Groups	21.654	48	.451		
	Total	22.691	49			

*. Correlation is significant at the 0.05 level (1-tailed).

Table 6 depicts the distribution of LS preferences based on learners' academic majors.. The results show that most of the mean scores of PLS among the learners from the School of Management are higher than those from the School of Communication. Learners from the School of Management prefer to use the kinaesthetic style ($M = 4.01$) whereas the auditory style ($M = 3.90$) is the most preferred LS of the respondents from the School of Communication. However, the overall data reveals that learners from both Schools are reported as higher users of the auditory and kinaesthetic learning styles ($M = 3.88$). This indicates clearly that the respondents in this study learn best by involving themselves in activities like role-play and discussion.

Table 6: Descriptive statistics of Perceptual Learning Styles and learners' fields of study

Fields of Study		Visual	Tactile	Auditory	Kinaesthetic	Group	Individual
Management	Mean	3.7600	3.7760	3.8560	4.0080	3.6800	3.2320
	Std. Deviation	.55678	.56663	.45651	.59014	.72572	.60740
	% of Total Sum	50.8%	52.3%	49.7%	51.7%	50.5%	47.9%
Mass Communication	Mean	3.6480	3.4400	3.8960	3.7440	3.6000	3.5200
	Std. Deviation	.50425	.61101	.46231	.44542	.67330	.73030
	% of Total Sum	49.2%	47.7%	50.3%	48.3%	49.5%	52.1%
Total	Mean	3.7040	3.6080	3.8760	3.8760	3.6400	3.3760
	Std. Deviation	.52875	.60738	.45516	.53435	.69400	.68050
	% of Total Sum	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

These findings are parallel to those of Fazzaro and Martin (2004), that is, that learners from the same field of study are likely to have similar learning styles. In this study, respondents from the School of Management and the School of Communication were examined, and these two schools offer subjects from the same field – applied arts. This finding is compatible with the preceding studies (Wei, Hoo, & See, 2011) that learners' major learning style preferences are affected by their fields of study.

Table 7 shows the relationship between ESL learners' preferred LLSs and their academic majors. The analysis shows that only the social strategy has a positive significant relationship with learners' academic majors at a significance value $p < .05$. A One Way ANOVA test, however, showed no significant relationships between these two variables. The detailed analysis of LLSs and learners' academic majors is shown in Table 8.

Table 7: Correlation coefficient between Language Learning Strategies and learners' fields of study

		Comm& Mgmt	Memory	Cognitiv	Compen. Meta	Affectiv	Social
Comm & Mgmt	Pearson Correlation	1	.137	.003	-.114	.106	.241*
	Sig. (1-tailed)		.172	.493	.215	.231	.490
	N	50	50	50	50	50	50

*. Correlation is significant at the 0.05 level (1-tailed).

Table 8: Descriptive statistics of Language Learning Strategies and learners' fields of study

Fields of Study		Memory	Cognitive	Compen.	Meta	Affective	Social
Management	Mean	3.1422	3.2514	3.3133	3.1733	2.8667	2.9933
	Std. Deviation	.61407	.62479	.67926	.73007	1.03302	.69469
	% of Total Sum	48.8%	50.0%	51.3%	48.8%	49.9%	47.3%
Communication	Mean	3.2978	3.2543	3.1467	3.3333	2.8733	3.3333
	Std. Deviation	.53453	.44516	.79542	.79673	.84749	.70218
	% of Total Sum	51.2%	50.0%	48.7%	51.2%	50.1%	52.7%
Total	Mean	3.2200	3.2529	3.2300	3.2533	2.8700	3.1633
	Std. Deviation	.57516	.53690	.73686	.76059	.93514	.71229
	% of Total Sum	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 8 shows that the majority of learners from the School of Management prefer the compensation ($M = 3.31$), followed by cognitive ($M = 3.25$) while learners from the School of Communication use metacognitive and social strategies ($M = 3.33$) in the learning process. This clearly reveals that the Management students in this study prefer guessing or rephrasing in acquiring information whereas the Communication students enjoy doing projects and interacting with peers for effective learning to take place. The data also clearly show that affective strategy is the least favoured strategy by learners from both Schools. The results in Table 7 and Table 8 are compatible with the findings of previous studies (Al-Hebaishi, 2012; Peacock and Ho, 2003; Rong, 1999; Rao & Liu, 2010) that learners' major fields of study affect the choice of their learning strategy. The choice of LLSs by the participants in the present study is similar to what the Social Science students in Peacock & Ho (2003), (Rong, 1999) and Rao and Liu's (2010) studies have selected because both group of students use more cognitive, compensation and social strategies frequently in the language learning process compared to Science majors.

Conclusion and recommendations

The purpose of this study was to find out ESL learners' most preferred PLS and LLS in learning English for Business Communication. The current study also examined the relationships between learners' PLS, LLS and fields of study. The findings that the kinaesthetic and auditory styles are the most preferred ones is consistent with past findings (Reid, 1987; Peacock, 2001; Ong, Rajendram and Mohd. Suffian, 2006; Mulalic, Parilah, & Fauziah, 2009). It was also found that learners employ metacognitive and cognitive strategies more than any other LLSs while the affective strategy is the least favoured among the ESL learners.

With respect to the third research question, visual learners were found to have significant correlations with memory, compensation, metacognitive and affective strategies, while a few other significant correlations were also discovered. These include the relationships between the tactile learning style and compensation strategy, auditory and social strategy, and group learning with the affective strategy. This is a noticeable indication that learners' PLS preferences have a considerable impact on their choice of LLS.

In addition, the results reveal that learners' major fields of study affect their choices of PLS and LLS. The findings show learners' academic majors significantly correlate with the tactile and

kinaesthetic learning styles. Learners from the School of Management use the compensation strategy more often than other strategies, whereas learners who are Communication majors select metacognitive and social strategies as their major preferences in learning ESP. Overall, the results from past research and the present study clearly highlight that the majority of social science students who learn ESP tend to be more kinaesthetically oriented, and use more learning strategies especially compensation, cognitive, metacognitive, social and memory in gathering information.

The findings of this research support the importance of recognizing learners' PLS and LLS. Thus, educators should be concerned with learners' learning styles and strategies so that meaningful and successful learning will occur. The results also highlight the influence of learners' major field of study towards PLS and LLS. Since both Management and Communication majors selected the auditory learning style as their major preference, activities like group discussion, PowerPoint/video/audio presentation, role plays and speaking and listening games should be conducted in the classroom. They should be given more oral exposure through impromptu/rehearsed speeches and one-to-one interview and negotiation skills in the class. Kinaesthetic learners prefer classroom activities like role play, writing and diagramming, and they also usually enjoy field trips. Thus, learners must be given the opportunity to conduct research outside the classroom, and could be asked to prepare a report on the activity. The presentation of audio and video clips and followed by question and answer sessions could attract the learners' attention too. Hence, teachers should be aware of these differences, and use suitable learning materials and conduct relevant classroom activities to meet learners' needs and course objectives. Besides, syllabus designers and textbook writers should also be aware of learners' PLS and LLS in order to produce teaching of the highest calibre, which will lead to successful learning.

However, the current research only discusses the effects of learners' academic majors on PLS and LLS use. Therefore, future research should focus on other variables that could affect learners' choice of learning styles and strategies like age, gender, language proficiency, motivation, ethnicity and achievement level. Furthermore, the sample of the study focuses on only two major fields of study only – Communication and Management. So, it is suggested that other academic majors be taken into account for future studies.

The present study was limited to 50 respondents, from the School of Communication and School of Management because of time and accessibility concerns. Hence, it could affect the generality of the research findings. A larger sample be used in future studies may be able to provide optimal findings in this area. Besides, this study only focuses on the data obtained from questionnaire – thus it limits the participants' responses. In future, interviews should be conducted, to obtain a more in-depth understanding of LLS and PLS.

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