

An Exploratory Study of the Language-learning Style Preferences and Language-learning Motivation of ESL Learners at a Vocational Education Institute in Hong Kong

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Abstract

This paper reports the findings of a survey of the language-learning styles (LLSYs) and language-learning motivation (LLM) of ESL learners studying at a vocational institute in Hong Kong. Findings indicate that both multiple style preferences and a lack of any style preferences were prevalent among participants. The level of LLM in general was moderate, and participants were more instrumental than integrative oriented. As hypothesised, positive relationships were found between LLSYs and LLM, and more motivated learners were found to have a greater variety of LLSYs. Findings confirm the hypothesis that learners with an integrative orientation exhibited a larger number of LLSYs, whereas learners with an instrumental orientation relied on a limited number of LLSYs (i.e., Auditory, Visual and Individual preferences) which provided more immediate learning results. This paper concludes with some implications for teaching.

1 Introduction

Research on language-learning styles (LLSYs) has been dominated by investigations which sought to identify patterns in learning styles and cross-cultural differences in the style preferences of ESL learners. Despite recommendations for teachers to take into consideration learners' style differences (e.g. Sutter, 1989), little attention has been given to how learners' style differences are related to different learner characteristics. Common learner characteristics which have been investigated in relation to LLSYs include personality, gender, and age. Language learning motivation (LLM) is an important learner characteristic which affects different aspects of ESL learning, for example, L2 achievement. By investigating how LLM is related to LLSYs, we can design more effective teaching methodology to improve L2 teaching. At the same time, investigating how LLSYs and LLM are related can generate insights for future developments on the theories of LLSYs and LLM.

There have also been few attempts in the local context to gather information on the LLSYs and LLM of young adult ESL learners. A review of the literature on LLM also shows that most of the research on the LLM of Chinese ESL learners was conducted in 1970-90s focusing on either secondary school students (Lai, 1999) or tertiary students (Walter & Balla, 1998). Nearly no attempts have been made to investigate the characteristics of academically less successful ESL learners undertaking vocational education. There is a need to update our understanding of this aspect because this group of learners might have different needs from their academically more successful coun-

terparts with regard to their ESL learning. Gathering more information on the characteristics of this group of learners can allow us to develop teaching methods specifically tailored to this group of learners. Therefore, another aim of this study is to collect information on the LLSYs and LLM of Chinese ESL learners studying at a vocational institute in Hong Kong.

Given the lack of descriptive research data on LLSYs and LLM of young adult ESL learners in Hong Kong and on the relationships between them, this study was intended as an exploratory one. The specific purposes of this study were:

1. to identify the patterns of LLSYs and LLM of ESL learners studying at a vocational institute in Hong Kong; and
2. to explore the relationships between LLSYs and LLM of ESL learners studying at a vocational institute in Hong Kong.

The remainder of this paper contains six sections. The first section is a review of the relevant literature on LLSYs and LLM as well as how they are related. The second and the third section introduce the research hypotheses and the methodology of this study, respectively. The fourth section focuses on the results of this study. The last two sections focus on the discussion and the implications of the findings for ESL teaching.

2 Literature review

Reid's (1987) construct of perceptual sensory learning styles and Gardner's theory of integrative-instrumental motivation (Gardner, 1985) formed the conceptual background of this study. The main reason for adopting these frameworks was the clear classification of learning styles they offer, which suited the exploratory nature of this study. The reasons will be presented in greater detail separately below. In this paper, reference is made to research which was based on these two constructs, particularly those that were conducted in the Chinese and Hong Kong contexts.

2.1 Language-learning styles

Research on LLSYs to date has been characterised by a proliferation of conceptual frameworks. More recent research included Wang's (2007) attempt to employ Felder's framework (Felder & Henriques, 1995), which found that university EFL learners in China showed a mild preference for Global, Visual and Sensing learning styles. Global learners tend to achieve understanding in a holistic way. Visual learners prefer information to be present in the form of pictures or diagrams. Sensing learners are concrete and methodical. This means that they are good at memorizing facts, doing hands-on work and following rules and standard procedures. Ueno (1998) focused on the relationship between learning styles as measured by the Myers-Briggs Type Indicator and students' preferences for error correction in speaking and writing, and reported that there was no statistically significant relationship between the two variables among students of Japanese as a second language. Descriptive findings of this study also show that extroverted students outnumbered introverted students significantly. Oxford, Hollaway, and Horton-Murillo (1992) point out that there are at least eight dimensions of learning styles out of a total of 20 dimensions identified in past research. In this study, Reid's (1987) construct of LLSYs of modality is adopted as it is more general, and fits the exploratory nature of the present study despite having relatively little empirical support. Another reason for adopting Reid's framework is that its measurement tool (the Perceptual Learning Style Preference Survey, PLSPS) was specifically developed for and normed on an adult ESL student population which included Chinese ESL learners (Reid, 1987, 1990). This means that it is more appropriate to the participants of this study. Finally, a lot of past research on LLSYs conducted in the Chinese context employed this framework (e.g. Dirksen, 1990; Dunn et al., 1990; Lin & Shen, 1996; Melton, 1990; Rossi-Le, 1995; Stebbins, 1995; Tobin, Wu, & Davidson, 1989).

Adopting this framework allows direct comparisons of the findings of this study with that of earlier research.

In Reid's (1987) framework, there are six elements of learning styles preferences: Visual, Auditory, Tactile, Kinaesthetic, Group and Individual. Learners inclined towards the Auditory style learn best when they hear words spoken and from oral explanation, whereas Visual learners learn best when materials are presented in books or other visual materials. Tactile and Kinaesthetic learners find it easy to learn when given the opportunity to engage in 'hands-on' learning and to be involved physically in learning, respectively. 'Group learners', as opposed to 'Individual' learners, find it more effective to learn when they are in groups rather than alone. Alireza and Abdullah (2010) studied the language-learning styles and language-learning strategies of Iranian engineering and political science graduate students studying abroad. They employed Reid's (1987) framework and found that political science graduates had major Tactile, Auditory, Group and Kinaesthetic learning styles, while engineering graduates had major Visual, Tactile, Group, Kinaesthetic and Individual learning styles. As mentioned in the introductory section, no attempts have been made in past research to identify the relationships between LLSYs and LLM. Therefore, in the following section, a descriptive account of the characteristics of LLSYs of Chinese ESL learners will be presented.

Rossi-Le (1995) found that Chinese ESL learners have a very strong Visual preference and strong Kinaesthetic, Tactile and Group preferences. At the same time, they were found to be visually oriented. A possible reason given by Rossi-Le is the pictorial and iconographic nature of their written languages. On the other hand, Chinese ESL students were found to prefer Kinaesthetic, Tactile and Individual styles in another study (Melton, 1990) of 331 Chinese undergraduate and graduate students. In a study of 1,076 Chinese ESL learners of English (Dirksen, 1990), Kinaesthetic style was also found to be the preferred style for most (73%), followed by Tactile (67%) and Visual (62%) learning styles. The least preferred style was Auditory (28%), and there were 68% who preferred collaborative learning. Dunn et al. (1990) found that Chinese-American elementary school students preferred to be more individual in their language learning. In addition to the above findings, a number of studies have found the existence of multiple learning styles (e.g. Reid, 1987; Stebbins, 1995; Tobin et al., 1989) and the non-existence of any major learning style preference among Chinese ESL learners (Lin & Shen, 1996).

We can see from the above review that findings on the LLSYs of Chinese ESL learners were quite diverse. Past research has found that Chinese tended to be Visual, Kinaesthetic, Tactile and Individual in their learning. In some studies Chinese were found to have multiple learning styles, whereas in one study they were found to have no major style preferences.

2.2 Language-learning motivation

Similar to the situation in LLSY research, LLM research in the past two decades has been characterised by a proliferation of frameworks. Despite the recent theoretical developments in LLM research, including the three-phase process model of Dörnyei and Otto (1998) and the application of Deci and Ryan's (1985) Self-determination Theory to LLM, the research conducted by Gardner and his colleagues (see Gardner, 1996) can be regarded as seminal. Mori and Gobel (2006) point out that the socio-educational theory of Gardner and his colleagues "has been an inspiration for many motivational studies" (Mori & Gobel, 2006, p. 196). The framework of Gardner and his colleagues has gained strong empirical support which most recently developed frameworks lack. Gardner's framework has been the foundation for the subsequent development of theories of LLM. Therefore, it is hoped that the current study which employs Gardner's foundational framework may also generate fresh insights which will further theoretical research in LLM. Because of this reason, Gardner's framework is adopted in this study. In Gardner's framework, integratively oriented ESL learners exhibit a strong desire towards understanding and assimilating the target culture and society, while instrumentally oriented ESL learners focus on pragmatic benefits such as getting a better job.

Most past research on LLM conducted in the Chinese contexts aimed at identifying the motivational types of ESL learners along the dimension of integrative-instrumental motivation. The main finding of these studies is that Chinese learners are predominantly instrumentally motivated in their ESL English learning (e.g., Lai, 1999; Teweles, 1995). Wong (2007) in a recent study found the prevalence of both types of motivation among pre-service teachers of Chinese in Hong Kong. There is a need to gather more updated information. Another characteristic of past research on LLM is that little attention was given to how LLM is related to other learner characteristics. This is one reason for the present study to focus on how LLM is related to LLSYs.

2.3 Language-learning motivation and language-learning styles

As mentioned earlier, how LLSYs are related to LLM has been seldom investigated in both the western and Asian contexts. The only study focusing on the relationships between the two variables was conducted by Ellis (1992). In his study, he failed to find any relationships between motivation (no matter integrative or instrumental) with learning styles. More specifically, integrative and instrumental motivations failed to distinguish learners who were knowledge-oriented from learners who were control-oriented.

In the previous sections, the reasons for conducting this study and adopting the theoretical frameworks were introduced. Previous findings on LLSYs, LLM and the relationships between them were also presented. The next section focuses on the hypotheses of this study.

3 Research hypotheses

In this study, there are two hypotheses regarding the relationships between LLSYs and LLM. The first hypothesis is that more motivated learners will exhibit a larger number of different LLSY types. This is because more motivated learners are more inclined to possess more and different modes of learning. Less motivated learners, on the contrary, tend to exhibit a limited number of learning modes. The second hypothesis is that learners with a higher level of integrative orientation exercise a larger number of different style preferences, given their interest in exploring the different aspects of the target language. The two specific hypotheses regarding the relationships between LLSYs and LLM of this study are:

1. More motivated learners exhibit a greater variety of LLSYs compared to less motivated ones; and
2. Learners with an integrative orientation exhibit a greater variety of LLSYs than learners with an instrumental orientation.

4 Methodology

4.1 Instruments

The entire questionnaire was administered in the Chinese language. The PLSPS [1] was translated into Chinese, back-translated into English, and modified. The reason for conducting back-translation was to check the accuracy of the translation. It was put into Part I of the questionnaire (see Appendix 1). The PLSPS is used to measure the respondents' inclinations towards the six style preferences of Visual, Auditory, Kinaesthetic, Tactile, Group and Individual preferences. The 30-item PLSPS are divided into six groups, with five items measuring each of the six dimensions of Visual, Auditory, Kinaesthetic, Tactile, Group and Individual preferences on a Likert scale from "Strongly Agree" to "Strongly Disagree". The style preferences are classified into Major, Minor and Negative/Negligible based on the total scores of the five items measuring each preference. As mentioned in section 2.1, the major strength of the PLSPS over other similar instruments is that it was specifically developed for and normed on an adult ESL student population

which included Chinese ESL students (Reid, 1987, 1990). Another strength is its satisfactory internal consistency (Reid, 1987). Lin and Shen (1996) in their study reported a Cronbach's alpha of .70.

Part II of the questionnaire contains the Chinese translations of the four items of the Integrative Orientation Scale and another four items of the Instrumental Orientation Scale of Gardner's (1985) AMTB (Attitude Motivation Test Battery). The seven-point Likert scale from "Strongly Disagree" to "Strongly Agree" was adapted to a five-point scale to facilitate response. Gardner's AMTB has undergone lengthy validation since the 1960s. Like the PLSPS, these eight items were translated, back-translated, modified and used in a previous study at the same institute. Cronbach's alphas of .804 and .817 were reported for the two scales, respectively (Wu, 2007). A lot of LLM research in the Asian and Chinese contexts was based on the AMTB. This means that the data gathered in the present study can be compared directly to previous findings, thus generating insights for future research directions for recently developed LLM theories. Satisfactory psychometric properties of the AMTB have been reported with continuous improvements (Masgoret & Gardner, 2003). The mean score of the four items measuring each type of orientations was used to indicate the level of motivation, while the overall mean of the eight items was used to indicate total motivation.

Part III of the questionnaire contains items on participants' background information and two open-ended questions on the reasons for respondents' perceived importance of English and other comments regarding the questionnaire.

4.2 Participants

Convenience sampling was employed in this study as it is very often employed in small-scale surveys (Punch, 2003). This sampling method suits the exploratory nature of this study. A homogeneous sample of year one diploma students was selected in this study because the aim of the study is to describe the LLSYs and LLM of a selected group of L2 learners at a particular vocational education institute. Therefore, a homogeneous sample would be more appropriate in order to represent typicality.

In order to facilitate the interpretation of the findings, it is necessary to introduce Hong Kong's socio-linguistic contextual background. In Hong Kong, English has been the dominant language in government, education, business and the judiciary since colonial times. At the same time, it has been an important medium for communication, the media, tourism, and the arts. There is a population of over six million in Hong Kong, with over 98% being Cantonese-speaking Chinese. Cantonese is widely used in the daily lives of monolingual Hong Kong society, and most people seldom have contact with English except in school and in the workplace. Therefore, most people regard English as having a 'value-added' role, especially in helping them achieve good educational, career advancement, and other utilitarian benefits. Despite the existence of English media such as newspapers, radio and television channels, there is a prevalence of Chinese entertainment media. Chinese mass media are more popular among the majority of the population, i.e. the local Cantonese-speaking Chinese.

Eight classes (or a total of about 200 students) were randomly selected from all the 28 first year Diploma classes of about 25 students each (i.e. from a total of about 700 students) at the institute. In the Diploma first year, students have to take about 200 hours of English. The English curriculum is vocationally biased and students have to learn the different types of communication skills of speaking, writing, reading and listening for the workplace.

4.3 Data analysis

SPSS was used to perform statistical analyses. Descriptive statistics of LLSYs, LLM and the internal reliability of the instruments were calculated. Pearson product-moment correlations and chi-square tests were also performed to investigate the relationships between LLSYs and LLM. Finally, qualitative responses gathered from the last two open-ended questions were coded. The coded data were further analysed.

5 Results

In this section, the descriptive data on the LLSYs and LLM of the research participants will be presented. Findings on how LLSYs are related to LLM will then be reported.

A total of 192 questionnaires were collected from the eight selected classes. Among the participants, 106 (57.6%) were males and 78 (42.4%) were females. Their mean age was 17.6 (SD=1.43). Most participants rated their English proficiency as average (55.9%) or poor (35.1%). Despite this, all of them regarded being proficient in English as either very important (68.3%) or important (31.7%). Out of a total of 148 responses gathered from the open-ended question on the reasons for their perceived importance of English, the most frequently mentioned reasons were related to careers (79, or 53%). This is followed by communication with foreigners (27, or 18.1%) and the importance of English in daily life (15, or 10.1%). A small number of participants mentioned other reasons such as travelling, being more knowledgeable, and interest in English-speaking cultures. None of the respondents had other comments on the questionnaire as a whole.

5.1 *Language-learning styles*

In the PLSPS, five items are used to measure each of the six types of style preferences. A preference is classified into Major, Minor, and Negligible according to the total score of the five items. Findings indicate that out of a total of 1,141 responses of the six types of style preferences (from all the 192 participants), 27.7% (n=317) were Major style preferences. The percentage of Minor preferences was 63.1% (n=720). Only a small percentage (9.1%, n=104) of the preferences were found to belong to the Negligible or Negative learning styles. In terms of the number of participants, one-third (n=64) of the 192 participants did not show any style preferences, whereas 25% of them (n=48) had one Major preference. Participants having two or more Major preferences constituted 41.7% (n=80) of the total number of participants. The prevalence of multiple style preferences found in this study confirms previous findings by researchers such as Reid (1987), Stebbins (1995) and Tobin et al. (1989). However, the finding about the lack of Major preferences also confirms the earlier finding of Lin and Shen (1996).

The number of participants who were found to have one or more Major preferences was 128. The total number of preferences they indicated was 313. Among these preferences, Auditory preference was the most popular (23.3%). This was followed by Kinaesthetic (17.9%) and Group (17.9%) preferences. Thus, we can conclude that Auditory, Kinaesthetic and Group preferences were the most popular learning style preferences among the participants. The least popular preference was Visual. The next least popular was Individual preference. Among the 30 items, item 1 ("When the teacher tells me the instructions I understand better.") had the highest mean of 3.83 (SD=.84). The item with the lowest mean were items 25 (which measures Tactile preference) and 29 (which measures Visual preference), with the same mean score of 2.9 and SDs of .87 and .83 respectively.

There are several observations from the above findings. Firstly, the finding that Auditory, Kinaesthetic and Group preferences are the most popular styles among the participants only partially confirms some of the previous findings, for example, the popularity of Kinaesthetic preference established by Rossi-Le (1995), Melton (1990), Dirksen (1990) and Dunn et al. (1990). However, past research did not provide any evidence that there is a preference for the Auditory style among Chinese ESL learners. The lowest mean score found for item 29 is completely contrary to the earlier finding that Chinese are more inclined to visual learning (Dirksen, 1990). This finding is also incompatible with Rossi-Le's (1995) observation that Chinese ESL learners are more visual in their learning because of the iconographic feature of their written language. One possible reason is the participants' weaker academic results (as also reflected by their average to poor English proficiency reported by the participants themselves) in comparison to average learners in Hong Kong.

This may result in the lower level of interest they display in reading textbooks. It is because many of them would find reading materials in English a difficult task. The low mean (2.9) found for item 25 is contrary to the findings of Dirksen (1990), Melton (1990), and Stebbins (1995). The popularity of Group preference found among the participants of this study parallels the findings of Dirksen (1990).

5.2 *Language-learning motivation*

The overall mean of the respondents' LLM was 3.9 (SD=.71). On a 5-point Likert scale (ranges from "1", "Strongly Agree", to "5", "Strongly Disagree"), the level of motivation of the participants of this study can be regarded as moderate. The respective means of Integrative and Instrumental orientations are 3.8 (SD=.79) and 4.0 (SD=.76). A t-test was conducted to test for the difference between integrative and instrumental orientations. Results indicate that the difference was statistically significant ($t=5.990$, $p<.001$), with participants being more instrumental than integrative in their orientation. This confirms the earlier finding that Chinese ESL learners in Hong Kong are more instrumentally motivated, as mentioned. However, we should remember that the moderate level of Integrative orientation found among the participants shows there was a prevalence of both types of orientation. This confirms Wong's (2007) recent findings.

The Cronbach's alphas of the Integrative and Instrumental Orientation scales are .80 and .82 respectively. They are higher than the alphas of .57 and .79 reported by Masgoret and Gardner (2003) and were comparable to that reported by Wu (2007). These statistics show the two measures have satisfactory internal consistency.

5.3 *Language-learning styles and language-learning motivation*

Significant correlations were found between LLM items and LLSY types, and the Pearson product-moment correlation coefficients are given in Table 1 below.

LLM item	Visual	Auditory	Kinaesthetic	Tactile	Group	Individual
1	.24**	.34***	.23**	.20**	--	.20**
2	.20**	.32***	.21**	.18*	--	--
3	.20**	--	.25**	.20**	--	.19*
4	.21**	.23**	.22**	.27***	--	--
Integrative orientation	.27***	.31***	.29***	.27***	--	.19*
5	.25**	.35***	.24**	.20**	--	--
6	.26**	.23**	.25**	--	--	.15*
7	.15*	.30***	--	--	--	--
8	.28***	.26***	.23**	--	--	.21**
Instrumental orientation	.29***	.35***	.26**	--	--	.20**
Total motivation	.30***	.36***	.29***	.21**	--	.21**

* $p<.05$

** $p<.01$

*** $p<.001$

Table 1: Significant Pearson product-moment correlation coefficients between LLM items and LLSY types

As we can see from the above table, both integrative orientation and total motivation were found to be correlated to all style preferences except Group preference. Instrumental orientation, on the other hand, was found to be unrelated to Tactile and Group preferences. The difference between the two types of orientation in the number of style preferences they are significantly related to suggests that integrative orientation is related to more style preferences. This provides some evidence in supporting the second hypothesis that learners with an integrative orientation exhibit a greater variety of LLSYs than learners with an instrumental orientation.

As far as the correlations of specific types of LLSY types and motivational orientations are concerned, the largest correlation was found between Auditory preference and instrumental orientation ($r=.35$, $p<.001$). This was followed by the correlation between Auditory preference and integrative orientation ($r=.31$, $p<.001$). We can see that the strongest relationships were found between Auditory preference and the two respective types of orientation. Auditory preference was also found to have the largest correlations with individual LLM items. Its correlation coefficients with item 1 (“Studying English can be important to me because it will allow me to be more at ease with other people who speak English.”) and 5 (“Studying English can be important for me because I’ll need it for my future career.”) were .34 and .35 respectively. These findings show that both types of orientation were highly related to the use of Auditory style. There are three possible reasons for this finding, and they are explained below.

The first possible reason is the role of English in the Hong Kong society. As mentioned in section 4, Hong Kong people’s contact with English are mostly passive in nature. For the majority of the Hong Kong population, English is seldom used except in the workplace and school. Our participants, who were still pursuing their studies, only had limited exposure to English in school. Although they might have had some exposure to English in their daily life, the exposure was again mainly passive in nature, for example, through entertainment media like the internet, television, films. Therefore, participants might be more at ease in exercising the Auditory style and found its use more rewarding.

Another reason is the teaching method. From primary school onwards, most students in Hong Kong receive their education in large classes. Despite the popularity of the communicative approach in English teaching, most primary and secondary schools in Hong Kong are used to being rather passive in their English learning. Most students spend a lot of time in their English lessons listening to teachers. They seldom have much opportunity to use English in the classroom, not to mention outside classroom, both in school and in their daily life. Therefore, participants might find it more rewarding to exercise the Auditory style.

The final possible reason is the unsatisfactory language proficiency of participants of this study. As we know, listening (compared to other skill aspects) has lower requirements in terms of vocabulary and higher level cognitive processing. Given their less satisfactory English proficiency, participants of this study might find it more confident and rewarding in exercising the Auditory style, and thus become more motivated in exercising it.

In order to further test the two hypotheses about the relationships between motivation level and the number of style preferences, Pearson product-moment correlation coefficients between the number of style preferences and motivation were computed. The respective coefficients of the correlations between the number of style preferences on the one hand and integrative orientation, instrumental orientation and total motivation on the other hand were .38 ($p<.001$), .30 ($p<.001$) and .36 ($p<.001$). These results support the first hypothesis that more motivated learners (regardless of their type of orientation) exhibit a greater variety of LLSYs, while less motivated ones exercise fewer types of LLSYs. However, the small difference between the first two coefficients does not provide direct evidence in supporting the second hypothesis that learners with a greater integrative orientation tend to have a wider variety of learning style preferences and those with a greater instrumental orientation have fewer style preferences.

The scores of each LLSY type and the levels of integrative and instrumental orientations were classified into two groups (i.e. High and Low) based on their means. A series of chi-square tests

was normed for intensive international ESL students studying in the U.S. In the development of her PLSPS, she found that Japanese students tended to respond towards the means, whereas native speakers used the entire range of the 5-point Likert scale of the instrument. Although clear patterns of style preference were found in this study, this does not mean that the present study is free from this problem. This might be the reason for one-third of the participants failing to report any Major style preference. This might also be a reason for the findings of this study confirming the findings of some other research (e.g. Lin & Shen, 1996) that Chinese had no Major style preference, and that of some other research (e.g. Reid, 1987; Stebbins, 1995; Tobin et al., 1989) which shows that Chinese had multiple style preferences.

As mentioned in section 5, a lot of participants expressed in response to the first open-ended question that one reason for the importance of being proficient in English was the desire to be able to communicate effectively with people of other nationalities, not only for work and survival, but also for travelling purposes. These reasons can hardly be classified as instrumental. These responses reflect the fluidity of the concepts of integrative and instrumental orientations. An example is that although Fotos (1994) classified travelling as instrumental, some studies suggest it is more related to integrative orientation (Kimura, Nakata, & Okumura, 2001). There have also been doubts about the distinction between integrative and instrumental orientations (Dörnyei, 1994), as other types of motivation, such as manipulative motivation, are at work and affect ESL achievement (e.g. Dörnyei, 1990). Other aspects of motivation, such as the need for achievement, were found to be more important than integrative and instrumental orientations in affecting ESL achievement. Despite these criticisms of Gardner's model, the two scales in this study achieved their exploratory purposes of identifying the motivation orientations of the participants. In future studies, more recent and sophisticated conceptual frameworks, such as the process model advocated by Dörnyei and Otto (1998), can be employed for further investigation.

7 Implications for teaching

The findings of this study provide several implications and recommendations for ESL teaching of this group of learners. In the following, implications and recommendations relating to the descriptive patterns of LLSYs and LLM found in this study will be presented. This will be followed by the implications and recommendations relating to the two hypotheses on the relationships between LLSYs and LLM of this study.

ESL teaching at the institute should be designed to suit the style preferences of its learners. Many have pointed out the danger of style mismatch between teachers and learners (e.g. Sutter, 1987). A preference for the Auditory, Kinaesthetic and Group styles were reported by the participants of this study. Therefore, English teaching of the institute should be designed so that this group of learners can have more listening practices, group activities and activities that require physical movements. By meeting these needs of this group of learners in their ESL learning, a possible outcome is that their level of motivation will be increased. This is especially true for the over one-third (35.1%) of the research participants who regarded their English proficiency as poor, as they might become easily frustrated given their negative self-perception of their English proficiency. The existing vocationally-biased curriculum can – to a certain extent – accommodate these learning style characteristics of this group of learners, as it emphasizes the practical use of English in the workplace. There are a lot of practices in the format of role play, group discussion etc. in the existing curriculum. These activities might allow learners at the institute to exercise their preferred styles. However, the curriculum should be further improved in a more systematically manner after taking into account the style preferences found in this study. Visual learning, which is highly emphasised in the traditional classroom, should be considerably reduced as it was the least popular preference among the research participants. This means that the teaching of some aspects such as reading and writing should be more carefully designed in order to minimize the risk of resistance among this group of learners in their ESL learning. An example is that instead of employing more traditional approach to teach reading and writing, teaching should be combined with listening ac-

tivities, group discussions and activities that require physical movements.

Both integrative and instrumental orientations were found to prevail among the research participants. Although the research participants were found to be more instrumental than integrative in their LLM, findings suggest that they are not only motivated by instrumental motives such as job security and financial rewards in their ESL learning, but also by more integrative motives such as friendship and appreciation of culture. Thus there is a need to emphasize both aspects in ESL teaching at the institute. An example of recommendations for teaching is that in addition to the existing topics such as taking telephone messages, and job interviews, topics such as appreciation of the arts and films can be introduced to the curriculum.

Findings of this study confirm the first hypothesis of this study, *more motivated learners exhibit a greater variety of LLSYs compared to less motivated ones*. The positive relationships found between the number of LLSYs and LLM imply that strengthening learners' LLM can result in the adoption of a wider variety of LLSYs. This, in turn, can bring about better learning outcomes. Cohen and Dörnyei (2002) point out the possibility of 'style-stretching' in enhancing learning outcomes. This is because having more different learning styles makes a learner better equipped to meet the requirements of learning tasks of different natures. On the other hand, given the positive relationship found between the number of LLSYs and the level of LLM, increasing the number of preferences can be an effective way of raising the motivation of ESL learning of this group of learners. Correlational statistics do not indicate causal relationships, but they show that two variables are positively related to each other. Therefore, it is possible that higher motivation can lead to more style preferences, and more style preferences can result in higher motivation.

Findings of this study support the second hypothesis, *learners with an integrative orientation exhibit a greater variety of LLSYs than learners with an instrumental orientation*. More specifically, instrumental learners were found to favour the Visual, Auditory and Individual styles, whereas integratively oriented learners were found to favour all except Group preferences. This means there is a need for teachers of the institute to emphasise the cultural aspect of ESL learning more, in addition to more instrumental incentives previously mentioned. Furthermore, in order to broaden the learning style repertoire of ESL learners undertaking education at the institute, more emphasis should be put onto fostering integrative orientation. This can be a more long-term goal of ESL teaching, as teachers may face resistance in changing the attitudinal aspect of language learning.

A summary of the implications of this study for teaching is as follows. Firstly, ESL teaching must suit the style preferences of learners. To achieve this, a learning environment in which learners can exercise their Auditory, Kinaesthetic and Group style preferences should be created at the institute. Language teachers of the institute should emphasise both integrative and instrumental orientations in order to increase both the number and strength of learners' style preferences. Language teachers of the institute can also focus on the cultural aspect of English learning. As integrative orientation was found to be related to more style preferences, fostering an integrative orientation should be adopted as a long-term goal of ESL teaching for this group of learners.

Notes

¹ Thanks are given to Professor Reid for her kind permission of using the PLSPS in this study.

References

- Alireza, S., & Abdullah, M.H. (2010). Language learning strategies and styles among Iranian engineering and political science graduate students studying abroad. *Educational Research and Review*, 5(2), 35–45.
- Cohen D., & Dörnyei, Z. (2002). Focus on the language learner: motivation, styles and strategies. In N. Schmitt (Ed.), *An introduction to applied linguistics* (pp. 170–325). London: Arnold Publishers.
- Deci, L., & Ryan, M. (1985). *Intrinsic motivation and self-determination in human behaviour*. New York: Plenum.
- Dirksen, C. (1990). Learning styles of Mainland Chinese students of English. *Issues and Developments in English and Applied Linguistics*, 5, 29–38.

- Dörnyei, Z. (1990). Motivation in second and foreign language learning. *The International Abstracting Journal for Language Teachers*, 31, 117–135.
- Dörnyei, Z. (1994). Motivation and motivating in the foreign classroom. *Modern Language Journal*, 78, 273–284.
- Dörnyei, Z., & Otto, I. (1998). Motivation in action: A process model of L2 motivation. Working Papers in *Applied Linguistics*, 4, 43–69.
- Dunn, R., Gemake, J., Jalali, F., Zenhausen, R., Quinn, P., & Spiridakis, J. (1990). Cross-cultural differences in learning styles of elementary-age students from four ethnic backgrounds. *Journal of Multicultural Counseling and Development*, 18(2), 68–93.
- Ellis, R. (1992). *Second language acquisition & language pedagogy*. Clevedon: Multilingual Matters.
- Felder, R.M., & Henriques, E.R. (1995). Learning and teaching styles in foreign and second language acquisition. *Foreign Language Annals*, 28(1), 21–31.
- Fotos, S.S. (1994). Motivation in second language learning pedagogy: A critical review. *Senshu University Bulletin of Humanities*, 24, 29–54.
- Gardner, R.C. (1985). *Social psychology and second language learning: The role of attitudes and motivation*. London: Edward Arnold.
- Gardner, R.C. (1996). Motivation and second language acquisition: Perspectives. *Journal of the CAAL*, 18, 19–42.
- Kimura, Y., Nakata, Y., & Okumura, T. (2001). Language learning motivation of EFL learners in Japan – A cross-sectional analysis of various learning milieus. *JALT Journal*, 23, 47–68.
- Lai, E.F. (1999). Motivation to learn English in Hong Kong. *Language, Culture and Curriculum*, 12, 280–284.
- Lin, H., & Shen, S. (1996). *Perceptual learning style preferences for EFL students in junior college in Taiwan*. ERIC Document Reproduction Service No. ED400680.
- Masgoret, A.-M., & Gardner, R.C. (2003). Attitudes, motivation, and second language learning: A meta-analysis of studies conducted by Gardner and associates. *Language Learning*, 53(1), 167–210.
- Melton, C.D. (1990). Bridging the cultural gap: a study Chinese students' learning style preferences. *RELC Journal*, 21(1), 29–54.
- Mori, S., & Gobel, P. (2006). Motivation and gender in the Japanese EFL classroom. *System*, 34, 194–210.
- Oxford, R., Hollaway, M.E., & Horton-Murillo, D. (1992). Language learning styles: Research and practical considerations for teaching in the multicultural tertiary ESL/EFL Classroom. *System*, 20(4), 439–456.
- Punch, K. (2003). *Survey research: The basics*. Thousand Oaks: Sage.
- Reid, J. (1987). The learning style preferences of ESL students. *TESOL Quarterly*, 21(1), 87–111.
- Reid, J. (1990). The dirty laundry of ESL survey research. *TESOL Quarterly*, 24(2), 323–338.
- Rossi-Le, L. (1995). Learning styles and strategies in adult immigrant ESL students. In J. Reid (Ed.), *Language learning styles in the ESL/EFL classroom* (pp. 118–125). Boston: Heinle and Heinle.
- Stebbins, C. (1995). Culture-specific perceptual-learning style preferences. In J. Reid (Ed.), *Language learning styles in the ESL/EFL classroom* (pp. 108–117). Boston: Heinle and Heinle.
- Sutter, W. (1987). *Learning styles in adult refugees in North Jutland*. Denmark: County of North Jutland.
- Sutter, W. (1989). *Strategies and styles*. Aalborg: Danish Refugee Council.
- Teweles, B. (1995). Motivation as a two-sided coin: Motivational differences between college-level and Japanese learners of EFL. *Texas Papers in Foreign Language Education*, 2(1), 15–34.
- Tobin, J.J., Wu, D.Y.H., & Davidson, D.H. (1989). *Preschool in three cultures: Japan, China, and the United States*. New Haven, C.T.: Yale University Press.
- Ueno, J. (1998) *Learning styles and error correction: How do learning styles affect students' perceptions towards error correction in a foreign language classrooms?* ERIC Document Reproduction Service No. ED429452.
- Walter, S., & Balla, J. (1998). *English medium of instruction at City Polytechnic of Hong Kong*. Hong Kong: City Polytechnic of Hong Kong, Department of English.
- Wang, L. (2007). Variation in learning styles in a group of Chinese English as a foreign language learners. *International Educational Journal*, 8(2), 408–417.
- Wong, R. (2007). Motivation and strategies to learn English: The case of pre-service teachers of Chinese. *Asian ESP Journal*, 3(2), 68–82.
- Wu, M.M.F. (2007). The relationships between the use of metacognitive language-learning strategies and language-learning motivation among Chinese-speaking ESL learners at a vocational education institute in Hong Kong. *Asian EFL Journal*, 9(3), 93–177.

Appendices

Appendix 1**Survey Questionnaire (English)**

We are carrying out a research on English learning, and would like to get your opinions. There are no right and wrong answers to the questions, and we would only like to get your valuable ideas. Information which you give will be kept confidential and only be used for research purposes. We would be grateful if you could spend 20 minutes to complete the following questionnaires.

Part I

People learn in many different ways. For example, some people learn primarily with their eyes (Visual learners) or with their ears (Auditory learners); some people prefer to learn by experience and /or by “hands-on” tasks (Kinesthetic or Tactile learners); some people learn better when they work alone while others prefer to learn in groups.

This questionnaire has been designed to identify the way(s) you learn best – the way(s) you prefer to learn.

Read each statement on the following pages. Please respond the statements AS THEY APPLY TO YOUR STUDY OF ENGLISH.

		Strongly Disagree			Strongly Agree	
1	When the teacher tells me the instructions I understand better.	1	2	3	4	5
2	I prefer to learn by doing something in class.	1	2	3	4	5
3	I get more work done when I work with others.	1	2	3	4	5
4	I learn more when I study with a group.	1	2	3	4	5
5	In class, I learn best when I work with others.	1	2	3	4	5
6	I learn better by reading what the teacher writes on the chalkboard.	1	2	3	4	5
7	When someone tells me how to do something in class, I learn it better.	1	2	3	4	5
8	When I do things in class, I learn better.	1	2	3	4	5
9	I remember things I have heard in class better than things I have read.	1	2	3	4	5
10	When I read instructions, I remember them better.	1	2	3	4	5
11	I learn more when I can make a model of something.	1	2	3	4	5
12	I understand better when I read instructions.	1	2	3	4	5
13	When I study alone, I remember things better.	1	2	3	4	5
14	I learn more when I make something for a class project.	1	2	3	4	5
15	I enjoy learning in class by doing experiments.	1	2	3	4	5
16	I learn better when I make drawings as I study.	1	2	3	4	5
17	I learn better in class when the teacher gives a lecture.	1	2	3	4	5
18	When I work alone, I learn better.	1	2	3	4	5
19	I understand things better in class when I participate in role-playing.	1	2	3	4	5
20	I learn better in class when I listen to someone.	1	2	3	4	5
21	I enjoy working on an assignment with two or three classmates.	1	2	3	4	5
22	When I build something, I remember what I have learned better.	1	2	3	4	5
23	I prefer to study with others.	1	2	3	4	5
24	I learn better by reading than by listening to someone.	1	2	3	4	5
25	I enjoy making something for a class project.	1	2	3	4	5
26	I learn best in class when I can participate in related activities.	1	2	3	4	5
27	In class, I work better when I work alone.	1	2	3	4	5
28	I prefer working on projects by myself.	1	2	3	4	5
29	I learn more by reading textbooks than by listening to lectures.	1	2	3	4	5
30	I prefer to work by myself.	1	2	3	4	5

Part II

Please indicate the extent you agree with the following statements by circle the suitable response.

		Strongly Disagree			Strongly Agree	
1	Studying English can be important to me because it will allow me to be more at ease with other people who speak English.	1	2	3	4	5
2	Studying English can be important for me because it will allow me to meet and converse with more and varied people.	1	2	3	4	5
3	Studying English can be important for me because it will enable me to better understand and appreciate British art and literature.	1	2	3	4	5
4	Studying English can be important for me because I will be able to participate more freely in the activities of other cultural groups.	1	2	3	4	5
5	Studying English can be important for me because I'll need it for my future career.	1	2	3	4	5
6	Studying English can be important for me because it will make me a more knowledgeable person.	1	2	3	4	5
7	Studying English can be important for me because I think it will someday be useful in getting a good job.	1	2	3	4	5
8	Studying English can be important for me because other people will respect me more if I have knowledge of a foreign language.	1	2	3	4	5

Part III

1 Sex: Male / Female

2 Age: _____

3 How do you rate your overall proficiency of English? (Please circle)

Excellent

Good

Fair

Poor

4 How important is it for you to become proficient in English? (Please circle)

Very important

Important

Not so important

5 Why?

6 Do you have other comments regarding this questionnaire?

** End of Questionnaire. Thank you **

Survey Questionnaire (Chinese)

我們現正進行一項英語學習的研究，希望你能給我們一些寶貴意見。下列問題沒有對或錯的答案，我們只希望得到你的看法。你所給我們的資料會絕對保密，而資料只會用於研究上。希望你能花一些時間，去完成這份問卷。多謝合作。

第一部分

不同人用不同方式去學習。例如有些人靠看會學得更好、有些人則靠聽、或靠經驗和實踐；有些人單獨時學習會更有效，而有些人在小組中學習會更有效。問卷的這部份是設計來找出你喜愛的一種或多種的學習英語的方式。請就你學習英語的情況，圈出你對句子的同意程度。

		極不同 意		極同意		
1	老師指示下，我會更容易明白。	1	2	3	4	5
2	我較喜歡通過課堂活動來學習。	1	2	3	4	5
3	我和他人合作時，成效會更好。	1	2	3	4	5
4	小組學習令我學得更多。	1	2	3	4	5
5	在課堂中，我和其他同學合作時會學得最好。	1	2	3	4	5
6	老師寫在白板令我學得更好。	1	2	3	4	5
7	當他人在課堂上告訴我怎樣做，我會學得更好。	1	2	3	4	5
8	當我在課堂上做習作時，會學得更好。	1	2	3	4	5
9	我在課堂上聽到的，比我閱讀過的印象更深刻。	1	2	3	4	5
10	我閱讀一些指示/指引時會記得更好。	1	2	3	4	5
11	如果我能製作某些東西的模型，我會學得更多。	1	2	3	4	5
12	當我閱讀指示/指引時，會理解得較易。	1	2	3	4	5
13	我獨個兒溫習時會記得更好。	1	2	3	4	5
14	當我要做課堂專題習作時，會學得更多。	1	2	3	4	5
15	我喜愛通過做實驗來學習。	1	2	3	4	5
16	繪圖有助我學得更好。	1	2	3	4	5
17	上課時尊心聆聽老師講課，助我易於理解。	1	2	3	4	5
18	我獨個兒工作時，會學得更好。	1	2	3	4	5
19	課堂中的角色扮演活動，助我理解。	1	2	3	4	5
20	聆聽別人在課堂的說話，助我學得更好。	1	2	3	4	5
21	我喜歡和兩三個同學一起做習作。	1	2	3	4	5
22	當我要製作某些東西時，我會將學過的知識記得更好。	1	2	3	4	5
23	我較喜歡和其他人一起學習。	1	2	3	4	5
24	閱讀比聆聽別人說話令我學得更好。	1	2	3	4	5
25	我喜歡為課堂專題習作製作一些東西。	1	2	3	4	5
26	參與課堂相關活動助我學習得更好。	1	2	3	4	5
27	在課堂獨個兒工作，我會表現得更好。	1	2	3	4	5
28	我較喜歡獨個兒做課堂習作。	1	2	3	4	5
29	自己閱讀課本，較聆聽老師更能助我學習。	1	2	3	4	5
30	我較喜歡獨個兒工作。	1	2	3	4	5

第二部分

請你圈出你對以下句子的同意程度。

	極不同意			極同意	
	1	2	3	4	5
1 我認為學英文是重要的，因為它能助我更無拘無束地和講英文的人相處。	1	2	3	4	5
2 我認為學英文是重要的，因為它能助我認識更多不同的人，並和他們交談。	1	2	3	4	5
3 我認為學英文是重要的，因為它我能促進我對英國藝術和文學的了解和欣賞。	1	2	3	4	5
4 我認為學英文是重要的，因為它可使我更自由地參加其他文化團體的活動。	1	2	3	4	5
5 我認為學英文是重要的，因為對我將來事業發展有用。	1	2	3	4	5
6 我認為學英文是重要的，因為它可令我成為一個更有知識的人。	1	2	3	4	5
7 我認為學英文是重要的，因為它能助我找到好工作。	1	2	3	4	5
8 我認為學英文是重要的，因為若我懂得多一種外語，其他人會更尊敬我。	1	2	3	4	5

第三部分

1. 性別：男 / 女

2. 年齡：_____

3. 你如何評價你的英語水平？（請圈出答案）

非常好 好 普通 差

4. 有一定英語水平，對你有幾重要？

非常重要 重要 不太重要

5. 為什麼？

6. 對這份問卷所提到的，你還有其他的意見嗎？

問卷完，多謝合作