

INVESTIGATION OF PERCEPTUAL LEARNING STYLE OF CFL LEARNERS: THE CASE OF MANDARIN CLASSES AT UNIVERSITI TUN HUSSEIN ONN MALAYSIA(UTHM)

Yeoh Li Cheng

*Centre for Language Studies,
Universiti Tun Hussein Onn Malaysia*

lyeoh@uthm.edu.my

ABSTRACT

Learning style is a way which an individual prefers to use in the process of acquiring knowledge and skills. Studies on learning style can give educators new directions for making changes in teaching methods to improve students' performance. This study was conducted to identify the predominant learning style preferences of Chinese as foreign language (CFL) learners at Universiti Tun Hussein Onn Malaysia (UTHM). The relationship between learning style and individual attributes such as gender and faculty was also explored. The Perceptual Learning Style Preference Questionnaire (PLSPQ) developed by Joy M. Reid was used and administered to 148 students. The data were analysed using percentage analysis. The results indicated that primary and secondary learning style of the students were kinesthetic and group learning.

Keywords: Learning style, Learning Style Preference, Chinese as a foreign language (CFL).

INTRODUCTION

In the present era, the idea of student-centered learning is widely advocated. Student-centered learning emphasizes each student's interest, abilities and the ways they learn (Lathika, 2016). At this core, learning does not mean "one size fits all." Every person's learning experience is not the same. Different people may have different learning preference due to their biological and psychological disparities.

A number of studies showed that students' individual differences play an important role in second or foreign language learning (Ehrman, 1990; Galbraith & Gardner, 1988; Oxford, 1992; Oxford & Ehrman, 1993; Scarcella & Oxford, 1992; Skehan, 1989). Learners' individual differences include age, gender, culture, motivation, learning style, learning strategy and learning aptitude. According to Oxford (1989, p.4), "language learning styles and strategies appear to be among the most important variables influencing performance in a

second language”. Therefore, it is important for both educators and students to understand these individual differences to enhance teaching and learning.

Learning style is defined as the learners’ preferred ways in the process of acquiring knowledge and skills (Honey & Mumford, 1986; Kolb, 1984). The concept of learning styles was developed from psychology to classify psychological types originally (e.g. Bloom & Lanzerson, 1988; Gardner, 1983, 1993; Kolb, 1984; Talmadge and Shearer, 1969; Tennant, 1988) and has emerged from cognitive style research 50 years ago (Stenberg & Grigorenko, 1997). In the mid to late 1970s, paradigms began to be developed to identify the more external, applied modes of learning styles (Dunn & Dunn, 1979; Reid, 1987).

Keefe (1979, p.4) defines learning style as “cognitive, affective, and physiological traits that are relatively stable indicators of how learners perceive, interact with, and respond to the environment”. Kolb (1984) defined that, learning is a process whereby knowledge is created through the transformation of experience. According to Reid (1995), learning styles “refer to an individual’s natural, habitual, and preferred way(s) of absorbing, processing, and retaining new information and skills. Learning styles vary from one individual to another, and each learner has a unique learning style. Being aware of students’ learning styles is essential for teachers so that they can help their students recognize how they learn best.

LEARNING STYLE MODELS

Various learning styles models and instruments have been constructed to assess students’ preferred learning styles. Dunn and Dunn (1975) have created the Learning Style Inventory to recognize the learning style preferences of English native speakers. The Dunn and Dunn Learning Style Inventory is based on the theory that each person has his/her strengths when it comes to learning. Learning Style Inventory is focused on five domains which are environmental, emotional, sociological, physiological, and psychological and there are 21 elements across those domains (Mitchel, 2009).

Another learning style model was constructed by David Kolb (1984). This model works on two levels, which are, a four-stage learning cycle and a four-type definition of learning styles. The four-stage learning cycle included concrete experience or “feeling”, reflective observation or “watching”, abstract conceptualization or “thinking”, and active experimentation or “doing”. Kolb used the terms *diverging*, *assimilating*, *converging* and *accommodating* to categorize learning styles, which each representing the combination of two preferred styles of the four-stage cycle styles (Kolb, 1984). Honey and Mumford (1986) identified four separate learning styles: activist, pragmatist, reflector and theorist, based on the four stages of David Kolb’s learning cycle.

Gregorc (Gregorc, 1985) focused his research on measuring how learners perceive and order new information. His model is a modified version of Kolb’s

learning dimensions, focusing on random and sequential processing of information. The Gregorc's model describes four learning style categories which are abstract random, concrete random, abstract sequential and concrete sequential. Felder and Silverman's (1988) model creates four dimensions of learning styles. These dimensions are active-reflective, sensing-intuitive, visual-verbal, and sequential-global.

Reid (1987) used the term "perceptual learning styles" to describe the variations among learners in using one or more senses to understand, organize, and retain experience. Reid categorized perceptual learning styles into six types which is visual, auditory, kinesthetic, tactile, group and individual preferences. Brown (1994, p113) said that Reid's classification is "very salient in a formal classroom setting", so it is used in this study to identify students' learning style in Mandarin classroom.

PERCEPTUAL LEARNING STYLES

Reid (1987) has developed learning style instrument called Perceptual Learning Style Preferences Questionnaire (PLSPQ) specifically for foreign language students based on how students learn best using their perceptions. The perceptual channels are visual, auditory, kinesthetic and tactile preferences, and the two social aspect of learning is group and individual preferences. Reid's PLSPQ is widely accepted in the research of non-native speakers of English, with reliability and validity established on high intermediate or advanced ESL classes (Reid, 1987).

In CFL context, PLSPQ has been used in Yi Hong and Fu Dongmei's (2012) research which investigated the learning style preferences of CFL learners in China. Yi and Fu investigate the perceptual learning style preferences of foreign students from central Asia that study Mandarin as foreign language in China. Besides that, Moe Moe Thew's (2016) also conducted a research on Myanmar middle school students' Mandarin learning style preferences using PLSPQ.

According to Reid, visual students learn well from visual stimulation such as seeing words in books or workbooks. Auditory students prefer hearing words spoken and oral explanations. They are benefited from lectures and class discussion. Kinesthetic students learn best by experiences, by being involved physically in classroom experiences. Tactile students like lots of hands on materials and enjoy writing notes. Students that prefer group learning style learn more easily in group interaction and class work. In contrast with group learning style, students who prefer individual learning style learn best when they work alone and they prefer to be a self-reader.

In the current research, Reid's Perceptual Learning Style Preferences Questionnaire has been used to assess the students' language learning style preferences of Mandarin learners.

OBJECTIVES AND RESEARCH QUESTIONS

This research is to study UTHM CFL learners' preferred learning style in learning Mandarin as foreign language. The following are the research questions of this study:

1. What is the predominant perceptual learning style preference of CFL learners at UTHM?
2. Is there any difference in the perceptual learning style preference of CFL learners' at UTHM with respect to their gender and faculty?

METHODOLOGY

Participants

The participants of this research included 148 undergraduate students from several faculties that studying Mandarin Chinese as foreign language at Universiti Tun Hussein Onn Malaysia. These students took Mandarin (Mandarin Level 1, UWB10902) as an elective. The group represented eight faculties, which are: Faculty of Civil and Environmental Engineering (FKAAS), Faculty of Electrical and Electronic Engineering (FKEE), Faculty of Mechanical and Manufacturing Engineering (FKMP), Faculty of Technology Management and Business (FPTP), Faculty of Technical and Vocational Education (FPTV), Faculty of Computer Science and Information Technology (FSKTM), Faculty of Science, Technology and Human Development (FSTPi) and Faculty of Technical Engineering (FTK). Table 1 shows the respondents' demographic background.

Table 1 Distribution of Sample

No.	Demographic Variable		N	Percentage
1.	Gender	Male	54	36.49 %
		Female	94	63.51 %
2.	Faculty	FKAAS	23	15.54 %
		FKEE	4	2.70 %
		FKMP	16	10.81 %
		FPTP	39	26.35 %
		FPTV	6	4.05 %
		FSKTM	41	27.70 %
		FSTPi	11	7.43 %
		FTK	8	5.41 %

Instruments

In this research, the perceptual learning style preference of the students was assessed using the Perceptual Learning Style Questionnaire (PLSPQ), which was designed by Reid (1987). Peacock (2001) reported that this questionnaire is valid and reliable to be used for research purpose. The questionnaire consists of 30 self-assess items and each five items are related to visual, auditory, kinesthetic, group and individual learning style preferences. Participants are asked to indicate how much they agree with those statements as it applied to their study of Mandarin with a 5-point scale: strongly agree (5), agree (4), undecided (3), disagree (2), strongly disagree (1).

Data Analysis

The data obtained from PLSPQ was analysed using percentage to identify the learning style preference of students.

RESULTS

Table 2 Perceptual Learning Style Preferences of Students

Learning Style	N	Percentage (%)
Kinesthetic	52	35.14
Group	31	20.95
Auditory	27	18.24
Tactile	16	10.81
Visual	14	9.46
Individual	8	5.41
Total	148	100

Table 2 shows the result of students' preference of perceptual learning styles. Based on the percentage analysis score for each learning style, the kinesthetic learning style is ranked first among all the learning styles. 52 students in this research preferred kinesthetic learning style (35.14 %) and followed by secondary learning style preference of 31 students as group learning style (20.95%). Next to group learning style there are 27 students preferred auditory learning style (18.24%) and tactile learning style is 16 students (10.81%). There are 14 students (9.46%) preferred visual learning style. The individual style becomes the least preferred learning style which is only 5.41%. This result is quite different with the results of Yi Hong and Fu Dongmei's (2012) research on learning style preferences of CFL learners in China. Yi and Fu investigate the perceptual learning style preferences of foreign students from central Asia that study Mandarin as foreign language in China. The result of the research showed that CFL learners preferred tactile and visual learning style. Besides that, this result also different with Moe Moe Thew's (2016) research on Myanmar middle school students' Mandarin learning style preferences. In Moe

Moe Thew's research, Myanmar middle school's Mandarin learner preferred group learning style. However, this result support the results of Reid's (1987) research on learning style preferences of English as a second language (ESL) learners which showed that ESL students strongly preferred kinesthetic learning style. This is also consistent with Peacock (2011) findings which showed that kinesthetic learning style was the most popular style of English as second language learners. Similar findings were reported by some Malaysian research that learners prefer the kinesthetic style the most in language learning (Ong, Rajadram and Mohd. Suffian, 2006; Mulalic, Parilah, & Fauziah, 2009; Muhammad & Rajuddin, 2010).

Table 3 Percentage Analysis of CFL Learners' Perceptual Learning Style Preference According to Gender and Faculties

		Visual	Tactile	Auditory	Kinesthetic	Group	Individual
Gender	Male	11.11	12.96	20.37	31.48	22.22	1.85
	Female	8.51	9.57	17.02	37.23	20.21	7.45
Faculty	FKAAS	13.04	4.35	8.70	39.13	30.43	4.35
	FKEE	0	0	25	25	25	25
	FKMP	0	6.25	31.25	37.5	25	0
	FPTP	7.69	15.38	15.38	38.46	10.26	12.82
	FPTV	16.7	0.0	50.0	16.7	16.7	0
	FSKTM	9.76	14.63	14.63	34.15	24.39	2.44
	FSTPi	9.09	0.00	36.36	27.27	27.27	0.00
	FTK	25.0	25.0	0.0	37.5	12.5	0

Table 3 shows the percentage analysis of CFL learners' perceptual learning style preference based on their gender and faculties. Analysis shows that female students were more prefer kinesthetic learning style than male students, while male students score high in group and auditory learning style. From the analysis of preferred learning style with respect to students' faculty, students from FKAAS and FSKTM preferred to learn with kinesthetic learning style. Nevertheless, though more numbers of students preferred kinesthetic learning style, the students from FPTV and FSTPi were keener in preferring auditory learning style than students from other faculties.

DISCUSSION AND CONCLUSIONS

The overall results show that the predominant learning style of CFL learners at UTHM are kinesthetic learning style. The students remember the information well when they engaged in activities or role-playing in the classroom. The findings that the kinesthetic style is the most preferred learning style is aligned with past findings (Reid, 1987; Peacock, 2001; Ong, Rajadram and Mohd. Suffian, 2006; Mulalic, Parilah, & Fauziah, 2009). The secondary learning style of students while learning Mandarin is group learning style. These students

learn more easily when they study with at least one other student. Group interaction and class work with other students stimulate them to learn and understand new information well and more successful in completing work. Next to group learning style students preferred auditory, tactile and visual learning style. Students' least preferred learning style is individual learning style.

In general, most of the female students of current study reveal that they prefer to learn kinesthetically while male students prefer to learn in group. This indicate that female students would like to learn through experience while male students like group interaction work most. The overall results also show that students from different faculty and gender appear to have different learning style preferences.

The findings of this study support the importance of recognizing learners' learning style preferences. Teaching style and learning style are closely related. Teachers should concern students different learning style so that the suitable teaching strategies can be adopted to increase students' academic performance.

Since the results highlight that students learn well in using kinesthetic, group and auditory learning styles, activities like role-play, language games, group activities and audio presentation should be conducted in the classroom. More experiences of practicing speaking and listening Mandarin in the class will help the students remember and master the skill. Besides, language game on grammar and vocabulary will engage students in learning process. The teacher should be aware of these differences to make sure the learning materials are suitable and the classroom activities are relevant to meet learners' needs. Along with this, students should know their leaning styles as well to maximize their learning potential and lead academic success.

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