

## Learning Styles among Non-native Speakers: A Comparative Study of Chinese and Iranian EFL Learners' Perceptual Learning Styles

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**[Abstract]** The purpose of the study is to investigate and compare EFL learners' perceptual learning style from two distinct cultures. The total sample of the subjects included 331 EFL learners (46.5% Chinese and 53.5% Iranian) who filled Perceptual Learning Style Preference Questionnaires (PLSQ). Descriptive and inferential statistical analysis was run and the results showed that Iranian EFL learners prefer visual and auditory styles, while Chinese EFL learners prefer tactile and kinesthetic style preferences.

**[Keywords]** learning style, perceptual preferences, Iranian, Chinese

### Introduction

Today, the teacher-centered approach is replaced by a learner-centered, so the role and responsibility of the individuals tend to be more important and change from passive to active. This change leads to learners' autonomy in its strongest form, i.e., the ability to conduct, monitor, evaluate, and check the learning and its processes. In learning a language, to become autonomous, learners experience special training; for instance, language learning strategies training. Language learning strategies are closely linked to learning style (Brown, 2007). Another trend is to become aware of the learners' learning style. "Aptitude and attitude, concepts, assumptions and beliefs, which in turn affect learning style, which itself, as many researchers in the field maintain, affects choice of learning strategy" (Hurd *et al.*, 2001, p. 346). Individual differences such as language aptitude, motivation, creativity, self-esteem, anxiety, learner's belief, and learning styles have an impact on second language acquisition (Dörnyei, 2005).

Learning style is viewed from a different perspective by Dörnyei who put learning styles in the classification of individual differences. "Among various IDs that exist, learning styles appear to be especially significant due to the way they mediate between personal characteristics and learning outcomes" (Tight, 2010, p. 799). In a more "student-centered approach, researchers have explored the relationship of learning style to second language acquisition" (Rossi-Le, 1989, p. 1). Different students learn in many different ways (Price, 1977, p. 3). Matching learning condition to learning style preferences leads to success than a single type of instruction (Tight, 2010, p.799). Besides, students who are taught by their own styles score higher on tests and factual knowledge, have better attitudes, and are more efficient (Price, 1977, p. 3).

All over, one of the preliminary stages for teachers to teach and learners to learn is understanding language learners' learning style. For example, some learners are auditory and some are visual learners, therefore, the medium for instruction to these groups can be using audio for the former group and studying charts for the latter group. Learning style has been defined as "cognitive, affective, and physiological traits that are relatively stable indicators of how learners perceive, interact with, and respond to the learning environment" (Keefe, 1979, p. 4). According

to Dunn et al. (1990) at least 21 components of learning style have been identified and most individuals have between 6 and 14 elements that make up their strong style preference.

Dunn (1990) mentions that 3/5 of learning style is determined by genetics and the other 2/5 is determined by external factors (as cited in Rhoads and Gough, 2005). External factors such as nationality (Griffiths, 2008), culture (Nelson, 1995), teaching style, kind of tasks, and educational system or context (Semeijn & Velden, 1999) also affect the individual's learning style. This means that learners have different learning styles not merely in the genes that they received from parents, but because of the different experiences that each of them gained during the life. This is what Kinsella (1995) called respectively nature and nurture. Guild (1994) commends that most researchers believe that learning styles are a function of both nature and nurture (p.3). Each child has a personal learning style that results from innate tendencies and environmental experiences (Fierro, 1997, p.1). Many educators emphasize on the role of culture in learning style (Dunn et al., 1990; Elaison, 1995; Hyland, 1993; Melton, 1990; Nelson, 1995; Oxford et al., 1992)

For example, in contrast to Iranian society that features competitiveness, especially among students in academic settings (Naserieh & Sarab, 2013), Chinese learners are from cooperative (i.e., collectivist) culture in which group is constant for a much longer period of time (Nelson, 1995). When considering all the different types of learning styles, one must also consider culture (Fierro, 1997, p. 7).

Rossi-Le (1995) accentuates the role of perceptual learning style in learning process that is neglected especially in English learning of adults. Also, very little study has been done to identify Iranian learners' learning style (Bidabadi & Yamat, 2010). Not only due to the paucity of research on learning style preferences of both Chinese and Iranian EFL learners at university level, but also because learning style is context-dependent (Naserieh & Sarab, 2013), the purpose of this article is to determine and compare Iranian and Chinese EFL learners' perceptual learning styles from two distinct educational settings and contexts.

### **Research Question**

Is there any significant difference between perceptual learning style of Chinese and Iranian EFL learners?

### **Review of the Related Literature**

While research on learning style refers back to five decades ago, the origins are traced back much further (Cassidy, 2004). Although research on has many ups and downs, it has a long and varied history (Sternberg and Grigorenko, 1997). The movement of learning style from psychology to language learning was done by Witkins, who brought the concepts of field dependent and field independent in 1962 (Wintergerst *et al.*, 2001). Before Witkins, Jung (1923) coined a theory of psychological types by which two attitudes (extraversion and introversion), two perceptual functions (intuition and sensing) and judgment functions (thinking and feeling) were introduced (Sternberg & Grigorenko, 1997). Brown (2007) defines learning styles as "consistent and rather enduring tendencies, or preferences within an individual" (p.119).

Reid (1995) presents all the learning styles under the categories of cognitive style, sensory learning styles and affective/temperament styles. Sensory learning styles include perceptual learning style, environmental styles, and sociological style. One of the subcategories of sensory preferences is perceptual learning style (Dörnyei, 2005; Reid, 1995). Perceptual learning style "concerns the perceptual modes, or learning channels through which students take information

(Dörnyei, 2005, P.139). The learning style that deals with an individual's perception is called perceptual learning style. There are five types of perceptual learning style (table 1).

1. Auditory learners: learns more effectively through the ear (hearing)
2. Visual learners: learns more effectively through the eyes (seeing)
3. Tactile learner: learns more effectively through touch (hands-on)
4. Kinesthetic learner: learns more effectively through concrete complete body experience (whole-body movement)
5. Haptic learner: learns more effectively through touch and whole-body involvement (Reid, 1995).

**Table 1**

*Activities That Learner with Different Sensory Preferences Like*

(Dörnyei, 2005; Felder & Henriques 1995; Kinsella, 1995; Kroonenberg, 1995; Reid, 1987; Oxford & Alderson, 1995; Pritchard, 2009; Tight, 2010)

Perceptual learning styles	Activities
Visual	Reading, studying charts, seeing images, looking at concrete objects, and perhaps even imagining mental pictures, diagrams, graphs, maps, posters and displays, timelines, films, demonstrations, colorful highlighting schemes, handout and various visual aids
Auditory	Audio tapes, Lectures, Conversations, Oral directions, Discussion, role-plays, and recitation
Hands-on (kinesthetic and tactile)	Working with tangible objects, media, and collages physical activity, field trips, manipulating objects and other practical, first-hand experience  Such learners generally find it helpful to do things like tap their pencil, walk around, underline, or even ride a stationary bike while  studying, making posters

***Rational for Comparing Chinese and Iranian Students' Learning Styles***

Joy and Kolb (2009) mentioned that the GLOBE study empirically arrives at ten cultural clusters – Anglo, Latin Europe, Nordic Europe, Germanic Europe, Eastern Europe, Latin America, Sub-Saharan Africa, Middle East, Southern Asia and Confucian Asia. According to Ho (1991) and Biggs (1996), as cited in Wang (2010), “Confucian Heritage Cultures (CHC) is the term used to refer to China, including Hong Kong and Taiwan, Japan, Korea and Singapore where Confucian values are prevalent to varying degrees (p. 57)”.

Historically, many studies in East Asia have been parts of Chinese culture sphere. That is to say, China, Japan, South Korea, Taiwan, Hong Kong, and ... are those countries that were influenced by Confucius heritage culture. Thus, in this research, one context is China and the other is Iran, the former is influenced by the Confucius and the latter by religion "Islam". Bagheri (2003) declared that there is no philosophy of education in Iran. He seeks the elements and framework for philosophy of education in Islamic thoughts which is the core and base of the Iranian culture. Although the philosophy of education rendered changes during the past, currently religion shapes it in Iran.

Generally, these two countries were chosen among these two educational philosophy because not only they are completely different, but also each represent the culture of majority (i. e., each is a sample of the countries where a culture is shared or is similar).

### ***Current Perspective***

Rossi-Le (1995) accentuates the role of perceptual learning style in learning process that is neglected, especially in English learning of adults. Moreover, few study has been conducted identify the Iranian learners' learning style (Bidabadiand & Yamat, 2010). "When considering all the different types of learning styles, one must also consider culture" (Fierro, 1997). Not only due to the paucity of research on learning style preferences of both Chinese and Iranians EFL learners at university level, but also because learning style is context-dependent (Naserieh & Sarab, 2013), the aim of the study is to investigate and compare Iranian and Chinese EFL learners' perceptual learning styles. This study aims at finding out the perceptual modalities of Chinese and Iranian EFL learners. It is a comparative study in the case of Chinese and Iranian EFL learners, i.e., to compare sets of data taken from two groups of Chinese and Iranian EFL learners.

## **Method**

### ***Subjects***

Three-hundred and thirty-one Chinese (154) and Iranian (177) EFL learners, who study English as their second language, at Zhejiang University and Azad University of Tehran (Central Branch) took part in the study. Their native tongues are Chinese and Persian. They study English as a major at the universities. Both the bachelors' and masters' degrees are chosen. There are chosen from the majors: English translation, literature, teaching, linguistics, and applied linguistics.

### ***Instrument***

Perceptual Learning Style Preference Questionnaire -- The scale was developed by Joy Reid in 1987. She designed the survey to study the learning styles of ESL learners. The questionnaire consists of 30 items designed to elicit the six perceptual learning style preferences. The questionnaire is five Likert-point scale by which learners respond from strongly disagree (1) to strongly agree (5).

### ***Procedure***

The participants were chosen randomly from two universities in China and Iran during two years study. Then they were given the questionnaires. The time for responding to the scale was 15 minutes.

## Results

The mean scores for auditory and visual modalities of Iranian EFL learners fell into the major category, while the mean scores of the other perceptual learning styles fell into minor category (see table 2). This shows that Iranian EFL learners prefer activities that involve both reading and listening.

**Table 2**

*Descriptive Statistics of learning style preferences of Iranian EFL learners (N=177)*

	Mean	Std. Deviation	Minimum	Maximum	Type
Auditory	18.16	4.017	8.00	25.00	Major
Visual	18.22	3.657	9.00	25.00	Minor
Kinesthetic	17.76	4.000	5.00	25.00	Minor
Tactile	17.20	4.243	7.00	25.00	Minor
Group	15.58	5.516	5.00	25.00	Minor
Individual	17.68	4.449	5.00	25.00	Minor

Note. 12.5 or less= Negligible; 12.5 to 18= Minor; 18 and above =Major

The mean score for learning style preference of tactile of Chinese EFL learners fell into the major category, while the mean scores of the other perceptual learning styles fell into minor category (see table 3). This shows that Chinese EFL learners prefer activities that involve Working with tangible objects and manipulation.

**Table 3**

*Descriptive Statistics of learning style preferences of Chinese EFL learners (N=154)*

	Mean	Std. Deviation	Minimum	Maximum	Type
Auditory	17.35	3.019	10.00	25.00	Minor
Visual	17.24	2.908	6.00	25.00	Minor
Kinesthetic	17.95	3.228	10.00	25.00	Minor
Tactile	18.09	3.602	9.00	25.00	Major
Group	15.73	3.915	6.00	25.00	Minor
Individual	17.25	3.925	7.00	25.00	Minor

Note. 12.5 or less= Negligible; 12.5 to 18= Minor; 18 and above =Major.

An independent-samples *t*-test was conducted to check whether there is a difference between the groups in terms of the scores related to the auditory learning style preference. The result of the *t*-test revealed a significant difference in scores in favor of Iranian ( $M = 18.16$ ,  $SD = 4.02$ ) when compared with Chinese learners ( $M = 17.35$ ,  $SD = 3.02$ ),  $t(329) = 2.11$ ,  $p = .036$ . This indicates that Iranian participants were more oriented toward auditory learning styles than their Chinese counterpart (table 4). Moreover, an independent-samples *t*-test was run to check whether there is a difference between the groups in terms of the scores related to the visual learning style

preference. The result of the t-test revealed a significant difference in scores in favor of Iranian ( $M = 18.22$ ,  $SD = 3.65$ ) when compared with Chinese learners ( $M = 1.24$ ,  $SD = 2.90$ ),  $t(329) = 2.71$ ,  $p = .007$ . This indicates that Iranian participants were more oriented toward visual learning styles than their Chinese students. Another independent-samples t-test was run and the result showed significant difference in scores in favor of Chinese ( $M = 18.09$ ,  $SD = 3.60$ ) when compared to Iranian learners ( $M = 17.2$ ,  $SD = 4.24$ ),  $t(329) = -2.06$ ,  $p = .040$ . This shows that Chinese students prefer more tactile style than their Iranian counterpart.

**Table 4**

*Independent sample t test for learning style preferences according to different nationalities (N=331)*

	Iranian (N=177)		Chinese (N=154)		t	df	Sig. (2- tailed)	95% Confidence Interval of the Difference	
	M	SD	M	SD				Lower	Upper
Auditory	18.16	4.017	17.35	3.019	2.111	329	.036	.055	1.581
Visual	18.22	3.657	17.24	2.908	2.713	329	.007	.269	1.690
Kinesthetic	17.76	4.000	17.95	3.228	-.482	329	.630	-.973	.590
Tactile	17.20	4.243	18.09	3.602	-	329	.040	-1.736	-.039
					2.060				
Group	15.58	5.516	15.73	3.915	-.281	329	.779	-1.171	.879
Individual	17.68	4.449	17.25	3.925	.913	329	.362	-.489	1.337

## Discussion

The finding shows that Iranian EFL learners preferred auditory and visual styles, while Chinese EFL learners preferred tactile style. That is to say, Iranian EFL learners favored more audio tape, lectures, oral directions, discussion, reading, studying charts, seeing images, and role play, while Chinese EFL learners favored making models and making something for class as projects.

The finding of the current study is consistent with Li's (2012) work. He used perceptual learning style preferences questionnaire for investigating only Chinese students' learning styles. Learners were from various majors like International Business, International Communication, management, finance, International studies, and Applied linguistics. The results showed that the learners favored tactile, kinesthetic, and visual learning styles.

The finding is in line with Reid's (1987) work. She explored perceptual learning style preferences among 43 university-affiliated English programs in the United State. Chinese learners who study in the United State favored style preferences were respectively kinesthetic, tactile, auditory and visual learning.

Melton (1990) explored Chinese students' perceptual learning style and the results showed that Chinese students preferred kinesthetic, tactile, and individual learning style preferences.

Chu (2013) explored the effect of perceptual learning styles and learning strategies on college students' spoken English proficiency. By the use of perceptual learning style preference questionnaire, strategy inventory for language learning, and standardized spoken English

proficiency test, the results showed that one hundred and seventy-four non-English sophomore students preferred mostly tactile and kinesthetic styles.

The result of the study is dissimilar to the study by Naserieh and Anani Sarab (2013) who explored the perceptual style among Iranian graduate students by using PLSQ. The questionnaire was translated to Persian. 138 students from diverse faculties participated in the study. The findings revealed that the participants favored kinesthetic and tactile modality and group learning style. The finding of the study is also dissimilar to the study by Seyfooni and Zarei (2011) who explored the relationship between the learning styles and multiple intelligence of ninety-four Iranian English majors. By giving the learners the adapted version of perceptual learning style preferences questionnaire (PLSPQ), the results showed that mostly preferred learning style was kinesthetic followed by auditory and visual style.

Rossi-Le (1995) studied 147 adult immigrants' perceptual learning style (Chinese, Laotian, Vietnamese, Spanish, Cambodian, Japanese, Polish, and Korean). By the use of PLPS, she found major learning style preferences for tactile and kinesthetic modes and group learning. The finding of the study also showed that Chinese immigrant students demonstrated very strong learning style preferences for visual learning, possibly because of the pictorial nature of their written language.

### Conclusion

The purpose of the study was to investigate and compare Iranian and Chinese EFL learners' perceptual learning style. All the participants studied English majors (translation, literature, linguistics, second language acquisition, and applied linguistics) at the university level. Iranian EFL learners prefer visual and auditory styles, while Chinese EFL learners prefer tactile and kinesthetic style preferences. Since learning style awareness predicts success in language learning and promotes it (Halbach, 2000), it is important to become familiar with the students' learning styles. Also the researchers suggest ideas for further research

1. The study explored only Iranian and Chinese EFL students. Not only more ethnic groups from different countries can participate in the study, but also countries with ESL contexts can be chosen.
2. The area of learning styles is too vast and other learning styles based on the Curry's model can be investigated.
3. Another study can be conducted for understanding both teachers' and learners' learning styles.

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