

## Mediational Role of Perceptual Styles in L2 Lexical Inferencing and the Associated Strategy Use

GHOLAM REZA ZAREI  
English Language Center,  
Isfahan University of Technology, Isfahan  
The Islamic Republic of Iran

HOSSEIN POURGHASEMIAN  
English Language Center,  
Qom University of Technology, Qom  
The Islamic Republic of Iran  
pourghasemian@qut.ac.ir

### ABSTRACT

*Due to the critical role that perceptual learning styles as indicators of individual differences play in L2 learners' activities and thus their academic achievement, the present investigation was aimed to study the role of L2 learners' perceptual styles in lexical inferencing and also the strategies used for lexical inferences in the Iranian context of English language learning. To this end, 134 participants majoring in different engineering fields took part in the study. They received strategy training on how to infer the meanings of unfamiliar words. They then answered a perceptual styles preferences questionnaire and were tested on the selected texts for lexical inferencing. They were asked to extract the meaning of unfamiliar words and simultaneously identify the relevant strategy employed for lexical inferencing by marking it on the strategy questionnaire. The analysis identified the biggest number of participants as being kinesthetic despite the fact that classes were mainly held through audio-visual activities. The findings also showed a meaningful difference between group categories of styles preferences and their lexical inferencing ability ( $F=4.57, p<.05$ ). As for the modifying effect of perceptual styles on the strategies used by various groups of learners, 'visual learners' were found to have the highest correlation with 'syntactic knowledge analysis' ( $r=.70, p=.01$ ). The results of the study point to the importance of individual differences in the perception of and interaction with the learning environment.*

*Keywords: perceptual learning styles; lexical inferencing; strategy training; strategy use; L2*

### INTRODUCTION

Inferencing is viewed as a significant cognitive ability in reading comprehension (Whitney 1987). Nassaji (2006) defines inferencing as the attempts made by readers to extract meaning from a text. As a cognitive activity involved in the act of reading comprehension both in L1 and L2, inferencing is achieved through various strategies ranging from establishing connections between different parts of text and linking the text with background knowledge to looking for cohesion and coherence within the text as well as making informed guesses about the unfamiliar vocabulary items. Vocabulary, making up a sizable portion of any text, almost always challenges L2 learners in the comprehension and interpretation of texts. Therefore, L2 learners attempt to compensate for the inadequacy of their vocabulary knowledge through either communication strategies in the production of the language or through inferencing strategies when facing comprehension problems associated with unknown items. In general, inferencing is a necessary tool in the context of L2 (English as a foreign language or EFL) learning, through which learners engage in the extraction of meaning whenever they fail to comprehend the new lexical items appearing in the text.

To guess the meanings of the unknown words of the text, learners appeal to lexical inferencing which relies on a variety of both linguistic and non-linguistic indicators (Oxford, 1990). Lexical inferencing is also considered as a compensation strategy for learners with a

low receptive vocabulary reservoir in the face of lexical challenges of the text. However, lexical inferencing as a part of strategic competence of learners cannot be achieved independently of the context, text, or learner. Studies examining the effects of strategy training have revealed that contextual clues, though sometimes effective, are limited in their efficacy and versatility and often fail to lead to successful guessing of meanings. Hue and Nation (2000) have shown the significance of text-related issues such as parts of speech of words and the density of words as important contributors to understanding texts. A host of other crucial factors affecting lexical inferencing may include the reading profiles of readers and the types of reading tasks (Levine & Reves 1998, Shen 2010), and also the types and the strength of the clues employed in the texts themselves (Frantzen 2003).

Although it is admitted that a great number of different factors affect the ways learners cope with the problem of inferring unknown words, it is undeniable that different learners do not cope with the problems in a similar manner. The learners act differently according to their own preferred learning modes. In other words, learners' responses to learning environments vary in conformity with their individual differences. Learners' perceptual learning styles are among those individual elements that have rarely been considered in the studies conducted on lexical inferencing. In fact, learners approach the challenges of learning tasks through their perceptual learning styles which can function as screening tools, making it possible for learners to adapt their resources to their different learning inclinations. Shen (2010) also believes that lexical inferencing can be influenced by learning preferences because learners may adjust their learning with their potential. Obralic and Akbarov (2012) believe that learning styles function as predictors of the learners' ability in acquiring certain aspects of a foreign language particularly the lexical items. Regarding the importance of learners' styles in lexical inferencing and language learning, and considering the benefits which they can provide for pedagogical programs, and also due to the dearth of research in this particular domain, the present study intends to discover whether L2 learners' perceptual styles have any bearing on their L2 lexical inferencing. Moreover, this study attempts to probe into the ways perceptual styles may moderate the employment of strategies for lexical inferencing.

#### LEXICAL INFERENCING, PERCEPTUAL STYLES AND LANGUAGE LEARNING

Educational psychology and cognitive theories have proven essentially relevant to account for the differences L2 learners display in learning English. In line with those theories, learning styles are presumed to affect L2 learning (Zarifi & Mukundan 2014) and are thus defined as traits of a composite nature involving cognitive, affective and physiological facets which are relatively stable, indicating how learners perceive, interact with and react to the learning environment (Keefe, 1979). Despite the variations in definitions used, it seems that the theoretical basis for individual differences arguably arises from cognitive theories with any act of learning predicating the direction that such processes come to provide (Dornyei 2005).

Lexical inferencing as a cognitive process is closely associated with the individual learners' independent attempts to acquire, store, and retrieve information (Peacock 2001). The independent inclinations of the learners are viewed as their perceptual styles preferences which affect the quantity and quality of learning. Tripp and Moore (2007) argue that learners, depending on their preferences, might concentrate on data, algorithms, and facts, and respond to various types of activities differently.

Keefe (1979) defines perceptual preferences as one aspect of individual differences, which is generally identified as those cognitive, affective and even physiological characteristics that are relatively invariable and encompass domains such as the ways learners perceive, interact with and respond to their learning stimuli. In other words, perceptual styles address both nature and nurture based manners and behaviors through which individuals can react to their environment, thus modifying and adapting it to their own advantage.

Reid (1995) who examined the notion of learning styles in ESL and EFL situations classified learners' style preferences into two social and four perceptual styles built into a questionnaire known as Perceptual Learning Style Preference (PLSP). Four perceptual styles (auditory, visual, tactile, and kinesthetic) and two social (group vs. individual) learning preferences were fitted into the questionnaire. It must be noted that these classifications of learning styles were intended to reveal how individual learners prefer one way or another to learn their materials. As noted by Reid (1995), students' perceptual learning styles can lead them to display certain preferences for certain activities in the classroom. Learners who are visually orientated tend to enjoy and employ mental images; they like movies and videos and prefer to learn a foreign language through written directions and instructions. In contrast, auditory learners are dependent on their memory strategies. They are delighted to be engaged in discussions, conversations, and enjoy group activities. Learners with tactile orientations take pleasure in making artwork associated with language learning, and also prefer to learn through handling and touching objects. As such, they cannot presumably be very good at learning words in an abstract way. Reid (1995) asserts that kinesthetic learners prefer Total Physical Response (TPR) approaches, games, or activities such as role play which necessitate moving around. Kinesthetic learners enjoy movement, and need a great deal of breaks during classroom activities and prefer authentic language. Unlike individual learners, group learners, generally take advantage of cooperative learning activities more effectively.

Kinsella (1995) contends that learners use a variety of perceptual learning styles to gain and process information. Learners who rely on an intuitive learning style are not at ease with a systematic and pre-structured syllabus. However, students with a judging personality are more at home with orderly, unambiguous, and predictable goals and prefer a structure oriented learning environment (Ehrman & Oxford 1990).

In the context of EFL/ESL learning situations, the role of individual learning is almost unanimously acknowledged (Ehrman 1999). Research has revealed close correlation between learning styles and language learners' success. For instance, Zhenhui (2001) discovered that learners' focusing on their styles of learning could lead to boosting their self-awareness and becoming more capable of realizing their potentials. Matthews (1996) also found that certain learning styles might be more effective than other learning preferences for particular tasks in learning environments. In general, he concluded that differences in perceptual styles can lead to differences in performance of the academic activities. With respect to the effect of perceptual styles, Kinsella (1995) found that auditorially oriented students respond poorly to corrections, questions, and written comments on their compositions' drafts. Carbo (1983) investigated the perceptual styles of elementary readers in a US school and noticed that good readers were more dependent on their auditory and visual abilities while poor readers had a strong preference for kinesthetic and for tactile learning. In another study, Collinson (2000) concluded that high achievers were independent of the classroom structure more than low achievers.

Shen (2010) conducted a study on the relationship between learning styles and lexical inferencing, the results of which revealed that different perceptual styles were related to different lexical inferencing abilities and that explicit instruction can be more beneficial to learners with certain perceptual styles than to others.

Studies on learning styles are wide and varied in scope considering a myriad of variables. Seifoori and Zarei (2011) investigated the relationship between EFL learners' learning styles and their intelligence, and discovered that the learners were mostly kinesthetic in their preference showing varying degrees of association with mathematical and spatial intelligence. In a different study, Ham (2005) found that visual style was the most preferred for Korean L2 learners having a significant influence on their achievement. However, the results of achievement have been reported to be different across learners' different levels (Yang & Kim 2011). Kim and Kim (2014) studied the structural relationship between perceptual styles, English learning motivation, and achievement and found that kinesthetic styles were negatively correlated with the respective variables while visual and auditory styles were positively correlated. The studies reviewed show that perceptual learning styles play a crucial role in EFL learners' success. Yet, as these styles have a far reaching effect they need to be investigated in relation to as many different learners' efforts and characteristics as possible. This study thus aims to deal with those learning styles in regard to the lexical inferencing and strategy use.

## RESEARCH QUESTIONS

Since learning a foreign language, i.e. English, has led to divergent findings which could not be explained simply through contextual, social and pedagogical methods, and because of the paucity of research on L2 learners' perceptual learning style preferences, and strategy use in relation to lexical inferencing ability, the present study attempts to bridge the gap and probe deeper into the mediational role that perceptual styles preferences may play in strategy use and lexical inferencing. Thus for this investigation, the following questions were addressed.

1. What are Iranian EFL learners' learning style preferences?
2. Do their learning style preferences relate to their ability in lexical inferencing?
3. Do learners' style preferences modify their strategy use in lexical inferencing?

## METHOD

### PARTICIPANTS

The participants were 134 male and female undergraduate students taking a General English course at Isfahan University of Technology, Iran. They were all majoring in four different disciplines of Engineering including mechanical, industrial, electrical, and computer engineering. They had enrolled for the required English course in the first semester of the academic year 2013-2014. The participants were selected based on availability sampling, and were already registered in four different classes. These participants were roughly at the same proficiency level based on the university criterion which allows only eligible students to take the course.

### TREATMENT

All the students were briefed on how to infer the meanings of unknown words at the beginning of the semester, and then they were asked to apply the strategies to the reading texts which they were supposed to read for their course. The treatment was based on Shen's (2010) plan, which involved an explicit instruction model, combined with inductive procedure presented by Clark and Nation (1980) serving as the strategy training design of the

present study. Table 1 provides the plan for the treatment and displays that the explicit model was concerned with what, why and how of the strategies, and the inductive procedure was intended to demonstrate the process of deriving the meaning of an unknown word.

TABLE 1. Treatment plan (Shen, 2010)

Strategies	Inductive Procedures
1. Lexical Knowledge: Using feature analysis to figure out word meaning based on its similarity with other words (i.e. similar spelling) or word parts (i.e. verb, noun, or adjectives)	Step 1: Decide on the part of speech of the unknown word. (Part of speech)
2. Monitoring: Elaborating the meaning by talking to themselves, such as “Let me think,” “well.” “Oh-oh” “Is this right?”	Step 2: Look at the immediate context surrounding the unknown word, simplifying it grammatically if necessary. Examine the relationship between the unknown word and the known words surrounding it. (Local context)
3. Repeating: Repeating a word or a phrase either to show their difficulties in decoding the meaning or to allow themselves sufficient time for processing.	Step 3: Look at the wider context of the word; that is, the relationship with adjoining sentences or clauses. Examine the relationship between the unknown word and the known words before or after the sentences with the unknown word. (Global context)
4. Syntactic Knowledge: Using knowledge of grammatical function within or between sentences & Monitoring	Step 4: Make connections between prior knowledge and text information. (Background knowledge)
5. Prior Knowledge: Associating a word together with another word based on background knowledge of the real world.	Step 5: Guess. (Guess)
6. Self-inquiring: Asking oneself questions about the words already inferred.	Step 6: Check the guess by arousing metacognitive knowledge. For example, substitute the guess for the unknown word. Monitor the guess by asking yourself: “Does it fit comfortably into the context? Does it make sense?” Evaluate the guess to decide whether to accept the idea or reject it and then try again or seek outside assistance. (Metacognitive knowledge)
7. Evaluating: Evaluating and judging themselves on their accuracy when inferring the meaning of a word.	

## INSTRUMENTS

Reid’s *Perceptual Learning Styles Preference Questionnaire (PLSPQ)* which has proven to be highly reliable (Peacock 2001) was used to measure the students’ learning style preferences. The 30 item questionnaire using a 5-point Likert scale assesses the learners’ preferred learning styles and reveals how they approach learning situations with respect to their perceptions (visual, auditory, kinesthetic, and tactile) and social preferences (group vs. individual). Each item of the questionnaire is rated on a scale ranging from strongly agree to strongly disagree. A score between 0 and 24 indicates that the use of learning style is either none or negligible, 25-37 shows minor learning preferences, and 38-50 denotes major learning styles. The present study categorised the students based on their *major* learning style preferences.

Two reading texts with different topics (to take care of possible topic bias) were used for the students’ lexical inferencing test. The reading selections contained about 100 words and their level of difficulty was determined through Fry’s readability graph to match the selected texts with the reading passages these participants were expected to read and practice in their classroom.

To match the test texts with those texts students had been assigned to read, some randomly selected excerpts of 100 word length from the assigned materials were measured for their readability, the obtained index of which was used to select the two above-mentioned test texts. Since the obtained readability index was around 16 for the assigned materials, we decided that test texts of the same index can be suitable for evaluating our students’

inferencing ability. It is worth mentioning that reading texts can be easily measured for their readability through Fry's graph available online ([www.readabilityformulas.com](http://www.readabilityformulas.com)).

Finally, another questionnaire, called strategy questionnaire, was constructed on the basis of the strategy treatment (strategies taught for lexical inferencing). Through this questionnaire the participants were required to determine the type of strategy they would employ during lexical inferencing attempts.

## DATA COLLECTION

Data was collected through the two questionnaires described above. To indicate their learning style preferences, the participants received the questionnaire (*PLSPQ*) and filled it out at the end of the semester. Then, through the strategy questionnaire the participants provided information over the strategies which they used while doing the lexical inferencing. In relation to the strategy questionnaire, it is worth noting that the participants were provided with the selected reading texts serving as the lexical inferencing test in which the participants underlined the unknown words and decided on the types of strategies (based on the strategy questionnaire) employed while inferring the meaning of the unknown words. The test lasted for about 80 minutes. In this study, since the participants were assumed to be different in their lexical ability, a single list of unknown words was not provided to be inferred by the participants through a decontextualised lexical test; but instead every participant performed the task individually depending on his/her own lexical knowledge of the given texts.

## DATA ANALYSIS

First, the data from *PLSPQ* questionnaire was analysed to tap into the participants' major learning styles preferences. As discussed above, the score range of 38-50 was taken as denoting the major learning styles based on which the participants were categorised into major categories displayed in Table 2.

Second, the participants' ability in lexical inferencing was assessed by giving 1 point to each unknown word for which either the correct meaning or a semantically acceptable meaning was provided. Then, the average scores of the participants within each category of learning styles were calculated and changed into the percentage via the comparison between the actual number of unknown words underlined by the participants) vs. the obtained scores (number of correctly inferred words). This obtained percentage revealed the correct inference the participants of that learning style category made in the text.

Third, to discover the types of strategies used by the participants, the researchers analysed the data of the second questionnaire (Strategy questionnaire). To infer the meaning of each unknown word, the participants were required to tick the relevant strategy they used. Each researcher analysed and scored the participants' inferences individually and then the researchers resolved all the ambiguities and controversies to arrive at 100% agreement. To do the statistical analysis, SPSS version 17 was used to first calculate the F-test for the group differences in lexical inferencing, and next to study the relationships between groups and their use of strategies through correlation analysis.

## FINDINGS

The purpose of the present study was first to decide on the participants' learning style preferences and see how their distinctive preferences may modify their ability in lexical

inferencing and strategy use. The analysis of data, as shown in Table 2, reveals that these participants are meaningfully different in terms of their style preferences and their lexical inferencing achievements ( $p < 0.05$ ).

The first noticeable point is that out of 135 participants, 33 of them or the largest proportion is identified as kinesthetic learners. As these learners provided the data at the end of the semester after they had received almost all their instruction, mostly through verbal practice, they may be presumed to have found the class atmosphere inactive and were thus unresponsive to their internal tendencies. Whether pre or post instruction tendency, it seems that quite a few learners do not comply with the present state of the studied classes and possibly prefer to abandon such a passive atmosphere of their classrooms in favor of more active, lively, and physical actions, which explains why they were kinesthetic.

TABLE 2. Learners' styles preferences and lexical inferencing ability

Learning Preferences	N	Min/Max	Mean	Rank	SD
Kinesthetic	33	18/35	25.9	4	23.14
Individual	27	19/44	23.3	5	20.11
Group	23	17/36	26.8	3	18.8
Tactile	18	13/13	21.7	6	21.73
Auditory	17	21/45	32.5	2	23.85
Visual	16	29/31	34.3	1	15.4
	df	SS	MS	F-ratio	Prob.
Between Groups	5	5546.2	11092.44	0.033	
Within Groups	129	6625.5	53.004		
Total		13412171.7			

$p < 0.05$

The second area of inquiry concerned the moderating role of learning styles in the use of strategies. This point was justified on the ground that learners adopt certain mechanisms to arrive at the proper meaning of texts (Paribakht & Wesche 1999). Data analysis showed that different strategies are related to the learning styles (Table 3). For example, syntactic knowledge strategy is mostly associated with visual learners ( $r = .70$ ) while lexical knowledge strategy is mostly related to audio learners ( $r = .60$ ). A distinct finding is that self-inquiry demonstrates no relationship with any of the learning preference styles. Again, no meaningful relationship was observed between the strategies and the two learning style preferences, kinesthetic and tactile.

Moreover, auditory learners do not display any significant relationship with other learning styles. As the last point in Table 3, the two general dispositional modes of 'individual vs. group' show meaningful relationship with most strategies.

TABLE 3. Correlations between perceptual styles and strategies

Categories	Strategies		Lk	Mo	Re	Sk	Pk	Si	Ev
	M	SD	22.3	13.5	16.8	18.5	19.3	13.6	20.6
Perceptual styles	M	SD	17.4	13.3	11.8	13.6	18.5	12.1	17.2
1. Vi	34.6	16	.32*	.59*	.21	.70**	.16	.17	.18
2. Au	32.2	23	.60**	.30*	.53**	.58*	.46*	.22	.45**
3. Ki	25.8	23.5	.10	.11	.08	.11	.13	.15	.10
4. Tac	20.3	22.6	.15	.04	.08	.18	.21	.12	.07
5. Gr	26.2	18.7	.60**	.65**	.10	.43*	.42**	.17	.10
6. In	22.3	20.7	.52*	.65**	.08	.25**	.63*	.18	.45*

Notes: Vi=Visual; Aud=auditory; Ki=kinesthetic; Tac=tactile; Gr=group; In=individual; Lk=lexical knowledge; Mo=monitoring; Re=repeating; Sk=syntactic knowledge; Pk=prior knowledge; Si=self-inquiry; Ev=evaluation

\*Correlation is significant at the .05 level (2-tailed).

\*\*Correlation is significant at the .01 level (2-tailed).

\*\*\*Correlation is significant at the .001 level (2-tailed).

## DISCUSSION

The results of the study reveal that language learners in the intended context are wide and varied in their learning orientations. They are shown to be especially inclined towards kinesthetic behaviors. The discrepancy between the learners' learning preferences and their performance on lexical inferencing test, as far as kinesthetic learners are concerned, is well evidenced in their min/max gain of 18/35% and the mean of 25/9 and the rank of 4 among the six groups. This finding shows that learners' potentials are more likely to be achieved if instruction atmosphere can closely accommodate their needs (Oxford 1990).

In stark contrast to kinesthetic learners stand two groups of 'visual and auditory', ranking first and second in lexical inferencing ability, respectively. The predominance of audio-visual activities in the classroom might have led to these results. Contrary to the fact that fewer students were identified as auditory and visual learners, they nevertheless make the most use of the class atmosphere. In other words, these two groups of learners find the classes predominantly structured around their own learning styles, through visual and auditory exercises. This demonstrates that language learning classes are not catering for all the learners' preferences and need to be redefined and redesigned.

In the same vein, the category of 'individual' learners shows that these learners make up a good proportion of the students (2<sup>nd</sup> in number) in the class but rank 5<sup>th</sup> in lexical inferencing ability, which may indicate the lack of sufficient opportunity provided in the class for such learners to achieve their own potentials. Of the two remaining categories of learning styles, 'group' oriented learners seem to have benefitted from the class instruction but 'tactile' learners show the least ability in lexical inferencing. This means that the treatment in the class has not been in favor of tactile learners, thus not enhancing their functioning in the concerned activities.

Overall, the findings of the study emphasise that learners' learning preferences play a crucial role in lexical inferencing. For the successful performance of language learners, classroom structures are either to be redesigned to cater for the differences among learners or learners are to be redirected towards variable modes of tackling the problems (Kroonenberg 1995). Though the latter seems to be contravening the idea of stability of cognitive styles of the learners, some social constructive approaches to language learning and teaching may nevertheless create a new and developmental milieu for learning and changing.

As shown above, perceptual style differences affect the types of strategies learners adopt to tackle the issue of lexical inferencing. Our findings point to the fact that visually oriented learners prefer a sight perspective and audio learners a conceptual one, which may both be accepted as closely pertinent to the learners' intrinsic preferences. As can be seen in Table 3 above, individual learners also prefer to use some associated strategies whereby they can account for their abilities most. Monitoring and prior knowledge have thus been employed by these learners. As individual learners are expected to be independent, the result reveals that they have resorted to these two individually available modes of tackling the problems in the texts.

The fact that self-inquiry has no relationship with any of the learning preference styles and that strategies are not meaningfully related to the two learning style preferences (i.e., kinesthetic and tactile) can be explained on the ground that either the learners require more targeted instruction on such strategic behaviors or these strategies are marginally covered within other relevant ones, thus not emerging as independent acts. This explanation brings up the issue of common underlying core of some behaviors, which require a particular design to fathom.

It is also found that auditory learners do not display any significant relationship with other learning styles. These learners probably try to hold to compensatory methods for their



repertoire deficit by capitalizing on some parallel strategies to infer unknown words. One such possibility can be reliance on componential analysis in which lexical items are broken into their semantic features to be grasped through certain strategies at the cost of disregarding others.

The last finding concerns the two general dispositional modes of 'individual vs. group' displaying meaningful relationship with most strategies. This can be accorded a special place in this study because it seems that these two social modes can account for some more minor learning preferences. It is possible to claim that the two modes have an all-encompassing capacity and thus can be addressed as representing other strategic behaviors. This explanation implies that the two need to be probably approached as two distinct complementary constructs rather than categorised within other perceptual styles differences.

## CONCLUSION

The current study investigated the role that learning styles could play in L2 learners' lexical inferencing and also strategy use. The results indicated that perceptual styles are significantly related to the learners' ability in inferring the meaning of unknown words. Perceptual styles were also shown to modify the strategy used by the learners.

The findings are in line with the idea put forward by Nassaji (2006) that learners rely on certain modalities for facing the challenges as they are tackled through their inherent learning styles. Such individual differences give learners adequate knowledge and strategies to make use of contextual and extra-contextual clues in inferencing. Unlike the claim made about the significance of clues in meaning extraction (Parry 1993), the results of the present study show that reliance on the clues for meaning reconstruction is modified by learners' learning preferences and also strategies used.

The findings also cast doubt over previous studies in that use of strategies for lexical meaning extraction is not limited to one single strategy, for example word analysis (Huckin & Bloch 1993) but a variety of strategies may be called on by the learners depending on the conditions within the text and also the learners' semantic and syntactic systems (de Bot et al. 1997). This further shows that meaning resides not in the text but in the readers' minds (Halliday 1985).

The results of the study can have important implications for teaching and learning English as a foreign language as well as language education in general. Kroonenberg (1995) and Ehrman (1999) both have addressed the problems learners may face if there exists a mismatch between learners' styles and teaching approaches. This study can draw teachers' attention to the importance of accommodating variations in the classrooms, especially where students have different commands of language proficiency which may affect the strategies they use (Hua, Nor & Jaradat 2012). Learners can also be made aware of their own preferences to balance the opportunities for themselves.

Despite the contributions it may make, this study has been limited to a small group of L2 learners. Thus to be more reliable and generalizable, future studies must adopt more in-depth and qualitative designs, incorporating various individual difference factors such as motivations, anxiety, etc. as well.

## REFERENCES

- Carbo, M. (1983). Research in reading and learning style: Implications for exceptional children. *Exceptional Children*, 49, 486-494.
- Clark, D.F. & Nation, S.P. (1980). Guessing the meanings of words from context: Strategy and techniques. *System*, 8, 211-220.
- Collinson, E. (2000). A survey of elementary students' learning style preferences and academic success. *Contemporary Education*, 71(4), 42-48.
- de Bot, K., Paribakht, T. S., & Wesche, M. B. (1997). Toward a lexical processing model for the study of second language vocabulary acquisition: Evidence from ESL reading. *Studies in Second Language Acquisition*, 19, 309-329.
- Dörnyei, Z. (2005). *The Psychology of the Language Learner: Individual Differences in Second Language Acquisition*. Mahwah, NJ: Lawrence Erlbaum.
- Ehrman, M. & Oxford, R. (1990). Adult language learning styles and strategies in an intensive training setting. *Modern Language Journal*, 74, 311-326.
- Ehrman, M. (1999). Ego boundaries and tolerance of ambiguity in second language learning. In: Arnold, J. (Ed.), *Affect in Language Learning* (pp. 68-86). Cambridge UP, New York.
- Frantzen, D. (2003). Factors affecting how second language Spanish students deriving meaning from context. *The Modern Language Journal*. 87, 168-199
- Halliday, M.A.K. (1985). *Language, Context and Text: Aspects of Language as Social Semiotic*. Geelong: Deakin University Press.
- Ham, S. (2005). Learning style preferences, English learning strategies, and EFL achievement of Korean university students. *Foreign Languages Education*, 12(1), 295-332.
- Hua, T. K., Nor, N. F. M., & Jaradat, M. N. (2012). Communication strategies among EFL students-An examination of frequency of use and types of strategies used. *GEMA Online® Journal of Language Studies*, Vol. 12(3), 831-848.
- Huckin, T., & Bloch, J. (1993). Strategies for inferring word meaning from context: A cognitive model. In T.Huckin, M. Haynes, & J. Coady (Eds.), *Second language reading and vocabulary learning* (pp. 153-178). Norwood, NJ: Ablex.
- Hue, H.C. & Nation, P. (2000). Unknown word density and reading comprehension. *Reading in Foreign Language*, 13(1), 403-430.
- Keefe, J.W. (1979). Learning styles: an overview. In Keefe, J.W. (Ed.), *Student Learning Styles Diagnosing and Prescribing Programs* (pp. 1-17). National Association of Secondary School Principals, Reston, VA.
- Kinsella, K. (1995). Understanding and empowering diverse learners in ESL classroom. In M. J. Reid (Ed.), *Learning Styles in the ESL/EFL Classroom* (pp. 74-86). Heinle & Heinle Publishers, Boston, MA.
- Kroonenberg, N. (1995). Meeting language learners' sensory-learning-style preferences. In: Reid, J.o.e.M. (Ed.), *Learning Styles in the ESL/EFL Classroom* (pp. 74-86). Heinle & Heinle Publishers, Boston.
- Levine, A. & Reves, T. (1998). Interplay between reading tasks, reader variables and unknown word processing. *TESL-EJ* 3 (2), 1-12. Liu, N., Nation, I.S.P., 1985. Factors affecting guessing vocabulary in context. *RELC Journal*, 16 (1), 33-42.
- Matthews, D. (1996). An investigation of learning styles and perceived academic achievement for high school students. *The Clearing House*, 69, 249-254.
- Nassaji, H. (2006). The relationship between depth of vocabulary knowledge and L2 learners' lexical inferencing strategy use and success. *The Modern Language Journal*, 90 (3), 387-401.
- Obralic, N. & Akbarov, A. (2012). Students preference on perceptual learning style. *Acta Didactica Napocensia*, 5 (3), 31-42.
- Oxford, R.L. (1990). *Language Learning Strategies: What Every Teacher Should Know*. Newbury House, NY.
- Paribakht, T. S., & Wesche, M. (1999). Reading and "incidental" L2 vocabulary acquisition: An introspective study of lexical inferencing. *Studies in Second Language Acquisition*, 21, 195-224.
- Parry, K. (1993). Too many words: Learning the vocabulary of an academic subject. In T. Huckin, M. Haynes & J. Coady (Eds.), *Second language reading and vocabulary learning* (pp. 109-129). Norwood, NJ: Ablex.
- Peacock, M. (2001). Match or mismatch? Learning styles and teaching styles in EFL. *International Journal of Applied Linguistics*, 11 (1), 38-58.
- Reid, J.M. (1995). *Learning Styles in the ESL/EFL Classroom*. Heinle & Heinle Publishers, Boston.
- Seifoori, Z & Zarei, M. (2011). The relationship between Iranian EFL learners' perceptual learning styles and their multiple intelligences. *Procedia, Social Behavioral Sciences*, 29, 1606-1613.
- Shen, M-y (2010). Effects of perceptual learning style preferences on L2 lexical inferencing. *System*, 38, 539-547.

- Tripp, L. O., & Moore, S. D. (2007). Examination of pre-service teachers' learning styles and temperament styles within an elementary science methods course. *Institute for Learning Styles Journal*, 1(Fall 2007), 23-33.
- Whitney, P. (1987). Psychological theories of elaborative inferences: Implications for schema-theoretic views of comprehension. *Reading Research Quarterly*, 22, 299–310.
- Yang, J.-S., & Kim, T.-Y. (2011). The L2 motivational self system and perceptual learning styles of Chinese, Japanese, Korean, and Swedish students. *English Teaching*, 66(1), 141-162.
- Kim, T.-Y & Kim, Y.-K (2014). A structural model for perceptual learning styles, the ideal L2 self, motivated behavior, and English proficiency. *System*, 46, 14-27.
- Zarifi, A. & Mukundan, J. (2014). Creativity and unnaturalness in the use of phrasal verbs in ESL learner language. *3L: The Southeast Asian Journal of English Language Studies*, 20(3), 51-62.
- Zhenhui, R. (2001). Matching teaching styles with learning styles for ESL/EFL instruction. *The Internet TESL Journal*, 7 (7).