Iranian EFL Learners' Lexical Inferencing Strategies at Both Text and Sentence Levels

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Abstract

Lexical inferencing is one of the most important strategies in vocabulary learning and it plays an important role in dealing with unknown words in a text. In this regard, the aim of this study was to determine the lexical inferencing strategies used by Iranian EFL learners when they encounter unknown words at both text and sentence levels. To this end, forty lower intermediate students were divided into two groups. For the first group, a text with 10 underlined words was given and for the second group, the same underlined words were given in separate sentences. The students were supposed to read the text and the sentences and to guess the meaning of the underlined words. Then some lexical inferencing strategies were given to them to determine which strategies they used in guessing the meaning of unknown words. The results showed that they used different strategies like using local context and word association in lexical inferencing and also they were more successful at the text level than the sentence one. The results also indicated that they were strategic learners using their own strategies including translation and cultural background knowledge to guess the meaning of the unknown words.

Keywords: Lexical Inferencing, Strategies, Text Level, Sentence Level

1. Introduction

Reading is a strong means of vocabulary acquisition for foreign language learners (Hu & Nassaji, 2014). Stanovich and Cunningham (1992) believe that people who read more have a great knowledge of vocabulary because, by reading, they can work out the meaning of unknown words from the context in ways which occur rarely in speech. According to Wesche and Paribakht (2010), reading comprehension and vocabulary development have a close relationship and they are intertwined together. Brown (2001) believes that the best learning of vocabulary occurs when a person encounters unknown words within the context of the surrounding discourse. Schustack, Ehrlich and Rayner (1987) suggest that rather than learning words in isolation or focusing on their dictionary meaning, it is better to learn vocabulary within a communicative framework in which they are meaningful. In this case, students can associate new words with the meaningful context in which they appear. Learning words and lexical phrases in context are the main part of language use and development. When language learners read or listen, they usually encounter unfamiliar words in the input. In these cases, they should try to guess their meanings by relying on context clues in the surrounding co-text (Henriksen, 2008). As a result, the way in which learners work out the meaning of unknown words has been the topic of many researches in recent years (Cetinavci, 2013; Clark & Nation, 1980; Hu & Nassaji, 2014; Nassaji, 2003; Wang, 2011).

According to Roskam (1998), developing guessing strategies can help students to overcome some of the problems arising from their lack of vocabulary knowledge. Inferential strategies are often emphasized in academic reading classes for EFL learners since they all the time encounter with the unknown words in their extensive readings and sometimes it is impractical to check the dictionary for every unknown word. Moreover, relying on dictionary

may limit learners to the sentence level and prevent their global text comprehension. Hence, the purpose of the present study is to examine the lexical inferencing strategies used by Iranian lower-intermediate EFL learners and to compare these strategies at both text and sentence level.

Lexical inferencing or the skill of guessing the meaning of unknown words from the context is a useful strategy in vocabulary learning. A large quantity of words can be learned incidentally in this way without using a dictionary (Clark & Nation, 1980). Haastrup (1991) defines lexical inferencing as "making informed guesses as to the meaning of a word in light of all available linguistic cues in combination with the learner's general knowledge of the world, her awareness of the context and her relevant linguistic knowledge" (p. 13). Lexical inferencing may be influenced by the word's semantic association with other words in the co-text, its predictability on the basis of backward and forward sentences, its semantic acceptability within the sentence and the degree of syntactic constraint on its meaning (Schustack, Ehrlich, & Rayner, 1987). Wesche and Pribakht (2010) believe that attention to a particular word form in a text and trying to guess its intended meaning in the context may lead to the retention of a new lexical item. Thus lexical inferencing is at the core of the relationship between reading comprehension and vocabulary development.

The amount of contextual clues can determine the success of guessing. In a study, Na and Nation (1985) replaced low frequency words at two different densities in a text by nonsense words. The participants were asked to guess the meaning of these unknown words by using context clues. Words in low density texts (1 word in 25) were easier to guess than words in high density texts (1 word in 10). They divided the participants into high proficiency level and low proficiency level. Those at high proficiency level were able to guess 85% to 100% of the unknown words, while those at low proficiency level guessed

between 30% and 40% of the unknown words. In another study, Cetinavcı (2013) explored the effects of contextual richness on lexical inferencing at the sentence level on 88 Turkish students learning English at an intermediate level. His findings show that rich context enables learners to guess the meaning of the word from context correctly. The low amount of contextual clues in a poor context may not be enough for the participants to understand the meaning of unknown words.

Studies show that learners use different lexical inferencing strategies while encountering unknown words in a text even when the text is of the same relative level of difficulty (Huckin & Block, 1993; Roskam, 1998; Hu & Nassaji, 2014). In a study, Huckin and Bloch (1993) conducted a think aloud study to determine the lexical inferencing strategies by three intermediate nonnative students encountering unknown words in a text. They found that students mostly used context clues especially local ones or sentence level cues as their inferring strategies. Also they found that the main cause of unsuccessful guessing was done by students who claimed that they knew the meaning of the word. Therefore, they did not try to find an appropriate contextual meaning for that word according to the existing cues in the text. In a descriptive study, Roskam (1998) used think aloud procedure to examine the use and effectiveness of lexical inferencing strategies by 17 Chinese university students. He concluded that the participants used different strategies for dealing with unknown words while reading in English. He constructed a scheme for his inferencing study based on the previous works that had been done on this case. The parameters for his scheme are as follows (Roskam, 1998, pp. 70-71):

a) Initial Identification (Recognition Processes)

-Word visual recognition

b) Strategic Sources

- Analysis of relevant information. The sources of this analysis can be inferred in many cases as follows:
- Guess using extra textual (world) knowledge
- Guess using discourse context (using backward or forward sentences)
- Guess using local (sentence level) context
- Guess using association (i.e., a clue word)
- Guess using syntactic knowledge
- Guess using morphological knowledge

From among these strategies, Roskam (1998) concluded that the participants mostly used the local context of reading for guessing the meaning of words and this strategy was the most effective strategy used for accurate guessing of the word. In another study to investigate the role of reading proficiency in Iranian EFL learners' use of knowledge sources in lexical inferencing and their level of success in guessing the meaning of unfamiliar words, Keivanpanah and Soltani Moghaddam (2012) found that the differences in L2 reading proficiency had a great impact on inferencing success.

The empirical study of the strategies actually used by readers while they attempt to guess the meaning of unfamiliar words is of great interest to many researchers. The aim of these studies is to investigate the employed strategies (successful or unsuccessful) by readers when they encounter unfamiliar words in a foreign language context. In their experiment on second language learners' responses to five different types of text based vocabulary exercises, Wesche and Paribakht (2000) reached a conclusion that learners sometimes use their own topical and world knowledge to fill the gaps in their own lexical knowledge. In another study done by Nassaji (2004, as cited in Hu & Nassaji, 2014) to explore the inferencing strategies used by EFL learners, the participants were divided into two groups of lexically skilled and less lexically skilled using a depth of

vocabulary knowledge test. The results showed that more than half of successful inferences were done by lexically skilled group. Also these groups used certain cognitive strategies such as section repeating, self-inquiry, and verifying more effectively than less skilled participants. Hu and Nassaji (2014) also conducted an exploratory study using think aloud procedure to investigate the inferring strategies by 11 Chinese ESL learners when they encountered unknown words in a text. They discovered twelve types of inferential strategies used by all learners. These strategies were then regrouped into four major categories of form-focused, meaning-focused, evaluating, and monitoring strategies. The results of their study showed that successful learners were aware of the existence of a gap in their knowledge and tried to fill that gap by context (both local and global context). They used their linguistic and background knowledge appropriately to fill the gaps in the textual meaning. They also reattempted their own inferences over and over when they failed and tried to find an appropriate meaning for the word.

All these studies show the effectiveness of using different strategies in lexical inferencing by students. This study examined the strategies Iranian EFL learners use in dealing with unknown words in a text. The strategies for lexical inferencing in this study were taken from Roskam (1998) with some modifications. Roskam (1998) got this strategic sources from a think-aloud study on tertiary Chinese students when they wanted to infer lexical meaning. The strategies used in this article include the following:

-Guess using local (sentence level) context

-Guess using discourse (backward or forward sentences) context

-Guess using association (clue words) or synonyms and antonyms

-Guess using syntactic knowledge

-Guess using morphological analysis

-Guess using background knowledge

-I knew the meaning of the word so I didn't use any lexical inferencing strategy.

As to the best knowledge of the researchers, no research has been done on exploring the inferencing strategies used by those Iranian students who have a lower level of language proficiency. Also no comparison has been done on the lexical inferencing strategies at both sentence and text level. Therefore, the purpose of the present study was to determine the inferencing strategies used by students who have a low level of language proficiency and to compare their used strategies at both sentence and text level. In this regard, the following questions were addressed:

1. Which strategies do Iranian EFL learners use in inferencing the lexical meaning?
2. Which level (text or sentence) is more effective for successful lexical inferencing?

2. Method

2.1. Participants

The participants were 55 students attending English classes at an English institute, Zabansara, Bonab, Iran. Their native language was Turkish and their second language was Persian. According to the placement test administered to them at the beginning of the semester, all of them were placed in lower intermediate classes. Their age range was between 18 and 22 years and they were both male and female.

2.2. Instruments and Materials

To accomplish the objectives of this study, participants were tested for their vocabulary knowledge using a 2000 receptive vocabulary level test (Nation, 2001). This test was chosen because it measures the knowledge of the most common words in English and it is easy to administer and score. Based on the results of this test, 40 students were selected. Then they were randomly divided into two groups and two different task sheets were given to them. The first task sheet consisted of a coherent reading text of nineteen sentences with ten underlined words and the second one consisted of 10 sentences taken from the text given to the first group with one underlined word in each sentence. The underlined words were the same in both the sentences and the text. The participants were required to guess the meaning of the underlined words and then write the exact Persian equivalents of these target words. A three point scale was used (2=correct, 1=partially correct, 0=incorrect) to determine the extent to which the participants were successful in guessing the meaning of the words.

Then a questionnaire was given to the participants in order to explore their inferring strategies. It was a strategy use questionnaire in which the students were to determine which strategies they used in guessing the meaning of unknown words and they were required to write their own strategies in cases that they did not use the strategies mentioned by the researchers.

2.3. Procedure

This study was a qualitative-quantitative study of lexical inferencing strategies used by Iranian EFL learners in two experimental groups. First, a 2000 receptive vocabulary level test (Nation, 2001) was administered to the

participants to ensure that they did not have much difficulty reading the text and also to check their homogeneity in terms of their knowledge of the words. This test is accepted as an appropriate test of vocabulary knowledge and the different levels of it have been used by many researchers (Hu & Nassaji, 2014; Nassaji, 2004; Paribakht & Wesche, 1999). According to Nation (1990), the basic 2000 vocabulary of high frequency test comprises 87% of the words in an academic text. Students who have a good grasp know a majority of general words in academic texts, although key academic terms may be unknown (Nation, 1990). This test can be used as a diagnostic test in a class (Valcourt & Wells, 1999). It is made up of sets of six words and three definitions. The participants had to choose which one of the six words matched the three meanings given. An example is given below:

1. original
2. private☐complete
3. royal☐first
4. slow   ☐not public
5. sorry
6. total

After administering this test and according to the scores, 40 students were chosen out of 55. All these 40 participants had at least a suggested cutoff score of 15 out of 18 correct items (Laufer & Nation, 1999) on the vocabulary size test. These participants were randomly assigned into text level group and sentence level group. Then they were taught that the best way to learn vocabulary and to comprehend the text better was through lexical inferencing. They were presented with some texts in which they identified the meaning of words through context clues. This lasted 2 hours.

Then, two task sheets were given to two groups of the participants. Their purpose was to examine lexical inferencing strategies used by Iranian EFL learners at both text and sentence levels. The first task sheet, which was given to the text level group, consisted of a reading text and a post quiz. The reading was a 210- word text taken from the book of *Select Readings, Second Edition* (Lee & Gundersen, 2011). This book is a reading book for ESL learners. The selected text was at the 'Reading Skill' section of the book teaching students how to use context clues to guess the meaning of words. Thus, it provided a rich and a complete context for every unknown word. Because of the amount of contextual clues for making lexical inferencing possible, the discourse context and the local context of this text provided enough clues for the participants to guess the meaning of the words even if they did not have any prior knowledge about them. Ten words were underlined in this text according to the results of a pilot study. In the pilot study, ten of the participants were presented with this English text. They were asked to read the text and to underline the words that they determined as unknown. As a result, ten unknown words were underlined. These ten words were chosen because the ten participants in the pilot study claimed that they knew the meaning of all the words in the text except the ones they had underlined. These words were content words (nouns and adjectives).

Participants were required to write an exact meaning of the underlined words in Persian. A three point scale was used (2=correct, 1=partially correct, 0=incorrect) to determine the extent to which participants were successful in guessing the meaning of words. This scale has been used by some researchers (e.g., Cetinavci, 2013; Hu & Nassaji, 2014; Nassaji, 2003). Two points were given for the exact meaning of the word in context, one point was given when the given meaning by the participant made sense in the context and zero point was given when the given meaning was incorrect.

The second task sheet was given to the sentence level group. It included ten sentences taken from the text given to the first group. Each of these sentences had the same unknown word presented in the text. Each sentence provided a rich context for every unknown word. The purpose here was to examine whether participants could guess the meaning of the word better at the text or at the sentence level. The same scoring criteria for the text were applied to this group too, two points for correct translations, one point for partially correct and zero point for the incorrect ones.

The post quiz was the same for the two groups and it included two parts. The first part was a questionnaire in which the participants were expected to choose the strategies they employed to guess the meaning of each unknown word. These lexical inferencing strategies were adapted from Roskam (1998) with some modifications done by the researchers. Roskams (1998) constructed a simple schema to investigate L2 lexical inferencing strategies using a think-aloud protocol. This schema includes two main parameters of initial recognition and strategic responses. Each of these parameters have their own sub-parameters too. This study used mostly the strategies mentioned in the parameter of strategic responses (items 1-6 in Table 1) and an initial recognition strategy (item 8). One strategy was added by the researchers (item 7). Also, the wording of the proposed strategies by Roskams (1998) was changed slightly in order to make them more comprehensible for Iranian lower-intermediate students. Wang (2011) has also used these strategies in comparing the lexical inferencing strategies used by EFL learners and ESL learners.

In this questionnaire, there were two choices for the participants. Either they could claim that they knew the meaning of unknown word beforehand or they could tell that they did not know the meaning of the word and had used

the given strategies for lexical inferencing. The second part in the task sheet included a question that had asked the participants to explain their own strategies in guessing the meaning of the words. This task sheet was prepared in Persian to avoid the ambiguities that is usually encountered by the participants and also because of their low level of proficiency in English. The scores from these two task sheets and the used strategies were entered into the *Matlab 2011a* for further analysis.

2.4.3. Data Analysis

The data in this study were the answers given by the participants in the task sheets that were used to evaluate the inferring strategies they used while reading the text and the sentences. The descriptive statistics of the two tests are presented here in the form of tables and graphs. These statistics show the efficiency or inefficiency of each strategy in both cases. Since there were 20 participants in each group and the number of words to be inferred was 10 for each task sheet, the total number of the used strategies in every test was 200 (20×10).

3. Results

3.1. First Research Question

In order to answer the first research question regarding which strategies Iranian EFL learners use in inferencing lexical meaning, the frequency of the used strategies was counted. The results obtained from the two task sheets determined the total frequency of the used strategies in guessing the meaning of unknown words in both the text and the sentence level (see Table 1).

Table 1. *Frequency of the Used Strategies in Both Text and Sentence Level*

	Strategies	Level	Absolute frequency	Correct	Partially correct	Incorrect
1	Guess using local (sentence level) context	Text	45	27	10	8
		Sentence	52	34	7	11
2	Guess using word association	Text	39	28	6	5
		Sentence	43	26	3	14
3	Guess using discourse context (backward and forward sentences)	Text	35	21	6	8
		Sentence	17	5	4	8
4	Guess using syntactic knowledge	Text	6	2	1	3
		Sentence	12	4	4	4
5	Guess using background knowledge	Text	18	11	2	5
		Sentence	21	10	5	6
6	Guess using morphological knowledge	Text	4	1	1	2
		Sentence	5	1	1	3
7	Guess using other strategies	Text	12	4	2	6
		Sentence	6	2	0	4
8	I knew the word, so I Didn't use anyone of these strategies	Text	41	15	8	18
		Sentence	44	14	5	25

As it is shown in Table 1, the most preferred strategies in both the sentence and the text levels were the strategies of guess using local context (strategy1) and guess using association words (strategy 2). Local context refers to the immediate context of the word (Wesche & Paribakht, 2010). Association refers to the first word that comes to the mind when the word is said in isolation and in order to guess the meaning of a word using this strategy, participants should find words in the text and the sentence which are semantically related. This connected word can be an antonym, synonym and a clue word (Meara, 2009).

The other strategies used were different depending on the text and the sentence level. For the text level, guessing strategies such as using discourse context, background knowledge and using other strategies, respectively, were the most frequent ones. For the sentence level, guessing strategies like using background knowledge, discourse context and syntactic knowledge were, respectively, the most frequent ones. The least used strategy was using morphological knowledge.

As it is clear from the table 1, in 44 cases at the sentence level, the students claimed that they knew the meaning of words and they did not use any strategy for lexical inferencing and in 156 cases (200-44), they used the strategies 1 to 7. While at text level, in 41 cases, students claimed that they recognized the word and they knew its meaning, so they did not use any strategy and in 159 cases, they did not recognize the word and they used lexical inferencing strategies. As it is shown in this table, the great difficulty in lexical inferencing occurred when students claimed that they knew the meaning of the words, but they did not try to check this meaning in the context in which they had been used.

3.2. Second Research Question

A three point scale was used (2=correct, 1=partially correct, 0=incorrect) to determine the extent to which the participants were successful in guessing the meaning of words. According to the scores in both groups, the mean, the standard deviation and the range of scores are shown in Table 2.

Table 2. *Scores Obtained from the Two Tests and the Related Statistics*

Type of test	Scores obtained from tests	Mean	Standard deviation	Range
Text	13,18,8,14,13,15,13,8,10,17,12,15,11,16,12,15,12,14,11,14	13.05	2.66	[8-18]
Sentence	13,14,6,10,16,8,11,11,6,7,9,12,17,11,12,11,15,9,13,10	11.05	3.09	[6-17]

It should be mentioned that the skewness coefficient of the scores in both text and sentence levels equals -0.19 and 0.11 respectively. Since these numbers are approximately equal to zero, the distribution of the scores is assumed to be normal. Thus, in order to investigate the significance of the difference between the means of the text level and the sentence level groups with 95% confidence interval ($\alpha = 0.05$), an independent samples t-test was used. In this test, the obtained statistics equal $df = 37$ and $t = -2.19$. Since $t_{\frac{\alpha}{2},df} = 2.02$, and $t = -2.19$ are in the critical area, the difference between the means is significant based on the t-test. Because the mean of the scores obtained from the text level is higher than the mean of the scores obtained from the sentence level (Table 2), the text level is considered a good model for inferring the meaning of words.

As is shown in Table 2, the mean of the scores at the text level is higher than the mean of the scores at the sentence level. This shows that the successful inferencing of a word in the text is higher than the sentence. Also the range and the standard deviation of the scores at the text is less than the sentence. This shows that the successful guessing of the meaning of words at text level is more consistent. Meanwhile, students are able to guess more correctly at a rich context than a poor context. It can also imply that teaching students to infer the meaning of words from the available context clues is more beneficial at the text level than the sentence level. So a rich context can provide better opportunities for students to understand the meaning of words.

The strategies' success in enabling students to guess the correct meaning of words for both text and the sentence levels is presented in terms of percentages in Table 3. As an example, the percentage of the success of strategy 1 (guess using local context) at the text level is calculated as follows: this strategy has been used 45 times and each correct answer has two points. Therefore, the

maximum point of the correct answers is 90 (45×2). Since this strategy is 27 times correct and 10 times partially correct, so the calculated points by this strategy equals 27×2+10×1=64. Thus the relative frequency of the success for this strategy equals $\frac{64}{90} = 0.7111$ and the percentage of its success is 71.11%.

Table 3. *The Percentage of Strategies' Success in Inferring the Correct Meaning of Words in both Text and Sentence Level*

	Strategies	Text level	Sentence level
1	Guess using local (sentence level) context	71.11%	72.12%
2	Guess using word association	79.48%	63.95%
3	Guess using discourse context (backward and forward sentences)	68.57%	41.17%
4	Guess using syntactic knowledge	41.66%	50.00%
5	Guess using background knowledge	66.66%	59.52%
6	Guess using morphological knowledge	37.50%	30.00%
7	Guess using other strategies	41.67%	33.33%
8	I knew the word, so I didn't use anyone of these strategies	54.87%	37.50%

In order to show the success of the strategies in lexical inferencing of words as a function, a polygon graph for the relative frequency of the correct items in each strategy is drawn for the text level and the sentence level. In this graph, the dotted line relates to strategies used by the participants at the text level and the continuous line relates to the strategies at the sentence level. This figure shows that the lexical inferencing strategies are more successful at the text level because the diagram related to the text is over the diagram related to the sentence. Therefore, teaching students to use strategies for lexical inferencing at the text level will be more useful and efficient.
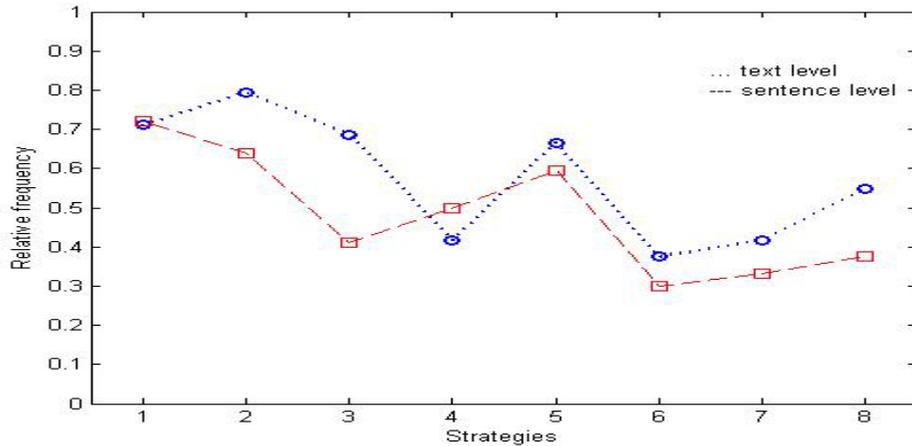
Figure 1. *Relative Frequency of Strategies Used at the Text and the Sentence Levels*

4. Discussion

Participants in this study used context clues to guess the meaning of words. In cases where they did not recognize the word or it was unknown to them, they used different lexical inferencing strategies. As the results revealed, the use of local context was the most frequently used strategy in both the text level (45 cases) and the sentence level (52 cases) groups. The percentage of the success of this strategy was also higher at the sentence level (72.12%) compared to the text level (71.11%). The same results can be found in the studies done by Chern (1993), Huckin and Bloch (1993) and Roskam (1998). As Paribakht (2005) points out, in the case that learners encounter lexical gaps while learning, they tend to rely on local context or sentence as the primary source of cues.

Schustack et al. (1987) indicate that lexical inferencing may be influenced by the word's semantic association with other words in the context. Therefore, the other frequent strategy used by the participants was using word association and collocation in both the text and the sentence levels. This is in consistent with the results obtained by Wang (2011) in which the two groups of Filipino

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and Chinese students preferred the strategy of using word association and collocation in word inferencing. The number of cases using this strategy was 39 for the text level and 43 for the sentence level. It should be mentioned that the students at the sentence level used this strategy more than the text level but the percentage of the success of this strategy was 79.48% for the text level and 63.95% for the sentence level. This means that even though the students used this strategy more at the sentence level, the success of using this strategy at the text was higher. Most of the participants preferred this strategy because their level of English proficiency was low and in fact, it is the easiest way to guess the meaning of words. Students just find a clue word and then, they guess the meaning of unknown word according to this clue.

Other frequent strategies were using discourse context (35 cases), using the strategy of background knowledge (18 cases) and using other strategies (12 cases) respectively for the text level. Also using background knowledge (21 cases), discourse context (17 cases) and syntactic knowledge (12 cases) respectively were the other frequently used strategies at the sentence level. The use of discourse context or, according to Schustack et al. (1987), the word's predictability on the basis of backward and forward sentences was 35 cases for the text level and 17 cases for the sentence level. The possibility of using discourse strategy was low at the sentence level because some of these sentences did not have any backward or forward sentences. The percentage of success of this strategy was 68.58% for the text level and 41.19% for the sentence level. Some of the students who had used discourse (forward and backward) context at the sentence level claimed that they had treated all the sentences as a whole text and as a result, they tried to infer the meaning of words by looking at the previous sentences. This, in fact, shows the students'

creativity in treating the sentences as a text. To some extent, they were right in this case because the sentences were taken from the same text.

At the sentence level, students preferred using the strategy of syntactic knowledge more than the text level and the success of this strategy was higher at the sentence level (50%) than the text level (41.66%). Syntactic knowledge involves the structure of the sentence and the word order. This can help students to guess the meaning of words correctly. In an experiment done by De Bot, Paribakht, and Wesche (1997), readers preferred sentence level grammatical knowledge as one of their major sources of lexical inferencing.

The least frequent lexical inferencing strategy was guessing through analyzing and morphological knowledge of the word. It seemed that the participants had little knowledge about using this strategy for lexical inferencing. This can be an effective strategy for lexical inferencing if more time is devoted to teaching it in classes.

In two strategies, participants generally were more successful at the sentence level than the text level. One was the strategy of using local clues and the other was the strategy of using syntactic knowledge for inferring the meaning of unknown words. In other strategies, students were more successful at the text level than the sentence level. Even when the students claimed that they knew the meaning of the words, the number of their correct items at the text level was higher than the sentence level. This shows that the primary information about the word can act better at the text level. Cetinavci (2013) posits that a rich context enables students to guess word meaning correctly.

Despite all the efforts to choose a text with 10 words less likely to be known by the participants, in about 41 cases at the text level and 44 cases at the sentence level, they claimed that they knew the word, so they did not use any strategy in guessing its meaning. It is also interesting to mention that many of

the failures in lexical inferencing were done by those participants who claimed that they recognized the word and they knew its meaning. They tried to force this meaning into the text without checking it in the context (Table 1).These findings are consistent with the results of studies done by Frantzen (2003); Huckin and Bloch (1993) and Roskams (1998). According to Huckin and Bloch (1993), this worked well when the students knew the correct meaning of the words, but failed when they misrecognized words without considering its meaning in the context. In some cases in this study, participants claimed that they knew the meaning of words, but they were 45.13% wrong at the text level and 62.50% at the sentence level. This shows that an important source of unsuccessful inferencing is a wrong assumption of the knowledge of word (Huckin & Bloch, 1993; Roskam, 1998). Likewise, Shen (2007) asserts that unawareness of polysemic words (words with multiple meanings) is the most serious problems students have when guessing the word meaning.

4.1. Other Strategies Used by the Participants

Participants in this study had their own style of strategies for lexical inferencing. In 12 cases at the text level and in 6 cases at the sentence level, they had used other strategies and they had explained them in part C of the questionnaire. These strategies were mainly meaning-focused strategies like paraphrasing or translating, using cultural background knowledge, and the use of dictionary. These explanations were written in Persian, so they were translated carefully into English by the two translators. The percentage of success of using other strategies was 50 % for the text level and 33.33% for the sentence level.

4.1.1. Translation

Some of the students claimed that in order to guess the correct meaning of the word, they translated the sentence in which the word occurred into their own language. Sometimes, they had translated the different parts of the word literally and then they had associated them with the other words in the sentence. An example is given below.

Leaf through the newspaper: I translated this phrase literally into Persian. Leaf means something that is a part of the tree. It can refer to the page of the book too. So there should be an association between leaf and newspaper. It means to go to the other page of the newspaper.

The student here has made an appropriate use of his own background knowledge and the context surrounding the target word (Hu & Nassaji, 2014). He knew the literal meaning of 'leaf' and used this knowledge to connect it with the textual knowledge of the newspaper to guess the meaning of the word through translation. Paraphrasing or translating is grouped under the meaning-focused strategy proposed by Hu and Nassaji (2014).

Some of the students had translated the sentence or the local context of the word to guess its meaning.

I commute regularly from my home to the place of my work: I translated this sentence several times. I knew the meaning of all the words except 'commute'. Then by translating the sentence, I understood that it means 'travelling'.

In this sentence, the semantic acceptability of a word within a sentence has influenced the lexical inferencing (Schustack et al., 1987). The student here claims that he has translated the sentence several times till he has inferred its meaning. This is the reattempting strategy which is categorized under monitoring strategies in Hu and Nassaji's (2014) types of strategies used by

students. According to Hu and Nassaji (2014), successful learners are aware of the existence of a gap in their lexical knowledge and try to fill that gap by the context and using lexical inferencing strategies.

4.1.2. Using Cultural Background Knowledge

The most widely used strategy by the participants was their use of background knowledge. This strategy was mentioned generally in the strategies part of the questionnaire. The success of using background knowledge was 66.66% at the text level and 59.52% at the sentence level. However, some explanations given by the participants in the part of 'explain other strategies' section of the questionnaire showed that this general strategy could be divided into the topical knowledge and the cultural knowledge. Some examples of the participants' use of their cultural knowledge in lexical inferencing are given below:

Packed: the train is packed with people. In my country, trains and buses are crowded all the time. So in association with people, it can mean 'full of people'.

Soggy Umbrella: In my country, people use umbrellas at rainy days. So it may mean 'wet'.

Students here have used their cultural background knowledge to guess the meaning of the word. According to Wesche and Paribakht (2000), learners are sometimes able to use the topic and world knowledge to compensate for gaps in their own lexical knowledge.

5. Conclusion

This study examined the lexical inferencing strategies used by students at both text and sentence level. The results showed that they used different strategies

while trying to guess the meaning of unknown words. Also they were strategic learners trying to find their own style for solving lexical problems. Moreover, it was found that the unknown words were guessed more successfully in a rich context than a poor context. In fact, as Clark and Nation (1980) pointed out, the amount of contextual clues could determine the success of guessing the meaning of the unknown words.

The findings have some pedagogical implications for teaching English. First, EFL learners should be taught explicitly how to use context clues instead of guessing widely. Second, the students should be aware of polysemy or the fact that a word may have several different but closely related meanings and they should check the meaning of a word in the context not to translate it by the first meaning that comes to their minds immediately. Third, the students should be taught how to use morphological structure (prefix or suffix) to guess the meaning of words. Last, the teacher should encourage language learners to use guessing strategies in a rich context with enough contextual clues.

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