Impact of Density and Distribution of Unfamiliar Lexical Items on Iranian EFL Learners'(Successful Reading Comprehension Achievement

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Abstract

Density and distribution of Unfamiliar Lexical Items (ULIs) appear to influence learners' Reading Comprehension Achievement (RCA). This study concerns the impact of these two variables on Iranian EFL learners' RCA. For this, two groups of students timetabled for the experiments designed to assess learners' RCA. To determine the participants' levels of proficiency a Quick Proficiency Test was first given to the total population of 87 students and 60 selected as participants. They were then divided into four subgroups of 15, each of which took the pertaining text as the treatment. To do so, three short passages were administered, two for the density and one for distribution. Then, data were gathered from the questionnaires and answers analyzed by SPSS. The results revealed the participants in low density/distribution subgroups outperforming their counterparts in high density/distribution subgroups on tests devised to measure the learners' inferencing of ULIs boldfaced in the texts. The selected method was a quasi-experimental, post-test only design and the procedures comprised short passages, multiple-choice tests, and statistics. To conclude, ULIs found detrimental to the learners' successful RCA in the foregoing experimentation, where it can serve as a resource to the EFL development programs.

Keywords: Density, Distribution, Inferencing, Reading Comprehension Achievement

Introduction

Since its inception in Iran's educational system through the national and ministerial curriculum legislation, and under an unrivalled position of influence of some socio-political factors, the English language became widely disseminated and deeply ingrained into the different educated levels of the society. This led the educational system to focus on syllabi with the concentration on reading comprehension. Reading can best serve as one of the reliable sources of comprehensible input supplied to the Iranian EFL learners particularly in academic and other pedagogical disciplines where the curricular matters are excessively designed to develop the students' reading comprehension capacities. Despite all concerted efforts made by the authorities nationwide in the educational system programs and much more besides that undertook by materials developers for assigning learners to reading activities to help them effectively acquire this language, most of the students still have problems when they are asked even to read effortlessly a short stretch of the language for comprehension. The students' incapability to accomplish such activities likely originates from a lack of adequate background knowledge (Noroozi & Gorjian, 2015, p. 105; Akbari & Mirhassani, 2000). This can interact with the presence of unknown words or Unfamiliar Lexical Items (ULIs) that may be found in a text, especially when it sometimes packed with such words that can pose readers a failure to decipher

such difficult items for comprehension. This might occur either in a compacted mode or on occasions when such ULIs are being sparsely scattered within the entire text. There are factors found capable to influence this process such as learners' previous experience, and their contributions to the tasks assigned, educational facilities, the germane corpora for different types of reading, and background knowledge, that all could variably affect the learners' successful RCA. Of those, the last one, (i.e., background knowledge) significantly correlates with vocabulary competence, however.

The EFL learners, in order to be able to comprehend such words, require devising strategies to arrive at appropriate meaning relevant to the context. Of these, one that can be well resorted to as a compensatory strategy is lexical inferencing via a subskill termed "Guessing the Meaning from the Context" (GMC). Such types of skill can help learners overcome their own linguistic deficiencies whenever they encounter a difficult item in a text (Oxford, 2002). The purpose of this study is to explore the density and distribution of ULIs found in a written text and their possible impact on Iranian EFL learners' successful reading comprehension achievement.

Literature Review

By definition, reading as explicated by Alderson (2000) is an intricate, multidimensional (Chegeni, 2013), and dynamic quality in the area of L2 learning, it is a complicated multilayer cognitive processing activity that requires metacognitive participation. Reading is in fact, a two-sided phenomenon; one that denotes the interaction between reader and what he/she studies like a text, (process); the other, however, points out the outcome of the process, (product). This mental activity relies upon two types of processing which are similar in some respect to their half-sisters of "parallel" and "serial" processing concepts (top-down vs. bottom-up), (Carroll, 2008). Reading heavily relies upon the readers' eyes (should not they be visually impaired) and requires the reader to draw on a number of rules and conventions and much more to employ proper strategies and techniques to consummate this process. There are variables that can affect reading of which some are dependent on the text such as topic or content, type or genre, organization, readability, whether the text is literary to name but a few. Others relate, however, to readers such as affect, interest, knowledge, motivation, and varying levels of both linguistic and metalinguistic skills (Alderson, 2000, p. 31). Of these, motivation refers to "the reasons underlie a behavior" (Guay, et al., 2010, p. 712) "the attribute that moves us to do or not to do something" (p. 106).

Reading is a highly demanding cognitive behavior, and the choice is a derivative of cognition utility (Stipek, 1996). It relies on motivation (Broussard & Garrison, 2004; Gottfried, 1990; Lange & Adler, 1997) where together with cognition they can affect one another, which both affect academic achievement, and that both, in turn, are affected by the social context of learning (Linnenbrink & Pintrich, 2002; Pintrich, 2003). As a learning behavior, reading takes place under a free choice on the part of a learner who can be granted autonomy to choose whether to do or not to do a task (Broussard & Garrison, 2004).

Reading comprehension is a multiphase process that feeds on a wide variety of strategies (Alderson, 1990) and involves several overlapping skills, which can be utilized in conjunction with each other if necessary (p. 13). It is a mental predisposition to decipher, to restore, and to reproduce information (Souvignier & Mokhlesgerami, 2006), to learn from, to capture, also to recapture meanings out of the deeper layers that schematized in the mind. In essence, RCA as a highly demanding mental activity, feeds on semantic memory, occupies a large portion of cognitive capacity (Pressley, 2002a) and calls forth the contextual support that may be offered by different linguistic and paralinguistic clues possibly available in a text (Tierney & Readence, 2005). It necessitates readers to bring a wealth of background knowledge into the context a priori,

to manipulate, and to reconstruct some sort of new competence out of the text (Guterman, 2003; Brandao & Oakhill, 2005). To succeed in reading, learners have to take such measures as being cognitively engaged, reassess and review the text, and make prediction and decision while reading a passage. They can plow through the text in the hope of gaining access to more abstract concepts lodged deep into the context, monitor their comprehension process, and look for inconsistencies if any (Lao & Chan, 2003; Houtveen & Van de Grift, 2007). In doing so, readers have at their own disposal a number of skills and strategies to exploit the main idea, to make a summary, to guess meaning from the context, and to use the available cues to answer questions that might have been made about the information existing in the text (Gersten, Fuchs, Williams, & Baker, 2001; Curtis, 2002; Kamil, 2000).

Some argued that reading comprehension draws upon more than 30 both cognitive and metacognitive processes such as inferencing, predicting and summarizing. These strategies are used to nurture active, competent, self-regulated, and intentional reading" (Trabasso & Bouchard, 2002, p, 177). To reach a higher level of competency aiming at RCA, students need to acquire a series of these strategies and skills through extrinsic training. There are recent studies (Ouellette, 2006; Ouellette & Beers, 2010) that espouse the pivotal role of vocabulary knowledge in successful RCA in older children in different grades and with such measures as breadth and depth of varying influence. It is assumed that the presence of difficult words would hinder comprehension and impedes progress in a reading task. The effect ascertained more hindrance especially when the number of ULIs goes up in a text (Curtis, 1987; Nation, 2001). Some studies in the field confirmed that the vocabulary size correlate significantly with successful RCA (Nation, 2001; Qian, 1999; Laufer, 1997) and word difficulty is important in determining the text complexity level. Overall, practice reading can help in developing the vocabulary size, enhance pronunciation and spelling, improve writing skills and increase learners potentials for performing grammar tests (Kim & Krashen, 1997), this is why advocates in the area overwhelmingly reaffirmed the leading role of reading comprehension in ESL and EFL development programmes and rather, learners' mastery through academic achievement. One of the ways for reaching this goal is inferencing the lexical items that can be found within a text.

Lexical Inferencing refers to an affective state that associates readers surmise the meanings attributable to the ULIs that they may confront within a text, by calling forth the contextual and linguistic cues available to them (Bengeleil & Paribakht, 2004; Morison, 1996). Paribakht and Wesche (1999) further defined this mental inductive activity as a cognitive processing behavior that identifies some unknown qualities by virtue of employing familiar features that are obtainable in a text (p. 198). It also refers, as Haastrup (1991) maintained, to a process of "making informed guesses as to the meaning of a word in light of linguistic clues all of which might be available in combination with the general knowledge of the world, his/her awareness of the context and pertaining linguistic knowledge" (p. 41). This type of strategy can assist learners to improve their semantic knowledge including collocations, their usage faculty that is developmental by nature and other lexico-grammatical characteristics the times when they try making inferences through reading tasks assigned (Hunt & Beglar, 2005, p. 28).

Review of Lexical Inferencing Literature

Reading is an essential skill for students in academic settings and represents the primary way for independent learning in an EFL or ESL context (Carrell & Grabe, 2002). Additionally, the arguments about the importance of this skill have been substantively taken into the account by a large portion of the studies conducted within the last few decades or so (Gu, 2015); the works that have greatly refined and enriched our knowledge about the enigmatic nature of

reading comprehension (p. 261). In the times passed on, likewise, an enormous amount of research has been conducted to explore and identify the notion that how L2 readers process ambiguous words found in a written text (Babaei & Riazi, 2008; Paribakht & Wesche, 2006; Nassaji, 2003, 2006; Bengeleil & Paribakht, 2004; Fraser, 1999; Haastrup, 1991; Bensoussan & Laufer, 1984; Carton, 1971). The inference of words that required global comprehension (i.e. words that identify the subjects in a sentence, those recurred for times in a context, and ones that indicated the main idea or topic of a passage) as Haynes (1993) states, appeared difficult to the guessers in the experiments. She moreover concluded that ESL readers behaved well upon the inferencing tasks with words that were locally identifiable whereas those who lacked adequate vocabulary proficiency were weak in GMC activities.

As elaborated in a number of studies, contextual clues that might be available in a text could aid readers to benefit from and arrive possibly at legitimate inferences by utilizing their own primary guesses for later comprehension (Gu, 2015). The first extensive investigation that was established on the inference-orientated contextual clues accomplished by Seibert (1945). He developed a categorical list of different cues that aimed to explore what he termed later "the mental processes of inference" (p. 305).

The next variable that is important to the text-based inferencing is the knowledge source. Years just before the time when Schmitt and McCarthy (1997) drew up their categorical distinction between types of knowledge source (i.e., linguistic knowledge, strategic knowledge and knowledge of the world), Carton (1971) had done it. He established one of the widely accepted classificatory of that type, a tripartite of siblings that comprised contextual, intralingual, and interlingual cues. The first one based on the text or the reader's knowledge of the world. The second but on the reader's language knowledge and the third drew upon the reader's L1, or the knowledge of other languages, the assortment that further outlined by Haastrup (1991).

The next study goes with Babaei and Riazi (2008) who explored the lexical inferencing performance of Iranian female students where they then compared the output of this variable (inferential ability) with students' L2 language proficiency and reading skills in the next learning levels. After the calculations, they found that students in the elementary level drawn upon contextual, interlingual, and intralingual cues available in the text whereas intermediate learners had recourse just to the contextual information and advanced students almost like the others to both contextual and intralingual clues. They also identified the advanced learners as they excelled in lexical inferencing and concluded that students' inferential ability bore no meaningful relationship with their own RCAs.

Others still provided convincing evidence about the effect of lexical difficulty, vocabulary proficiency, and its size on readers' successful lexical inferencing (Laufer, 1997, p. 21; Ulijn, 1984; Ostyn & Godin, 1985; Ostyn, Vandecasteele, Deville & Kelly, 1987; Ulijn & Strother, 1990). For example, Ames (1966) introduced a number of variables that could exert influence over the learners' GMC attitudes. These variables were the number of unknown words and repetitive clues, the degree of explicitness of the clues, whether clues are more extensive and whether a given unknown item is polysemous (a word with several different meanings), the readers' background knowledge and their familiarity with the topic, to name but a few. To sum up, many variables still exist that can influence reading in general and its comprehension in particular. Of those, the density and distribution of ULIs most likely tend to have an adverse impact on L2 learners' successful RCA. For readers to overcome such barriers, using strategies like GMC sound promising, a technique that L2 learners are being advised to employ when they encounter these unknown lexical items in a text. There are further studies in the literature that contribute to the notion of lexical difficulty and its impact on EFL learners' RCA, Yet, since

space here matters, this concise summary was extracted from the main body of the thesis's literature review section to meet the guidelines established by the prospective journal.

Statement of the Problem

The underlying assumption is that the existence of ULIs in a given text would hamper the EFL learners' RCA. Therefore, this research designed to find out whether participants could infer contextual meaning better in texts with high-density/high-distribution of ULIs or in those with low-density/low-distribution of ULIs otherwise.

Research Questions

Q1)Does the density of ULIs (i.e., the number of the Unfamiliar Lexical Items lodged in a written text) have any significant effect on Iranian EFL learners' successful reading comprehension achievement?

Q2)Does the distribution of ULIs (i.e., the occurrence pattern of the Unfamiliar Lexical Items packed into a written text) have any significant effect on Iranian EFL learners' successful reading comprehension achievement?

Null Hypotheses

Ho1)Density (i.e., the number of ULIs compacted in a text), has no effect on the Iranian EFL learners' successful RCA.

Ho2) Distribution (i.e., the occurrence pattern of ULIs found in a given text) has no effect on the Iranian EFL learners' successful RCA.

Methodology

Participants

To begin with, a population of 87 Iranian EFL students was scheduled to participate in this study from two distinct educational societies including Islamic Azad University, Najafabad Branch (IAUN), and Chabahar Maritime University (CMU). The sample pool comprised 60 students who were selected from the main population through the administration of the Quick Proficiency Tests. Those whose total scores on the test each summed over a range from 48 to 55 considered as the advanced-level participants for this study, (as specified in the QPT ranking chart). Participants were all Iranian senior students studying English as a Foreign Language in two different academic settings; the selection was not gender biased.

Design

The design that identified for this quantitative research study was a quasi-experimental, post-test only experiment with a systematically nonrandomized assignment of the subgroups to the experimentation.

Instruments

Following are the instruments that were used for data collection:

Proficiency Test

First, a Palma Model QPT was used. It consisted of 60 items and 2 separate sections, which was used to assess the students' abilities in:

a) Grammar and vocabulary, and comprised 44 items

b) Reading comprehension, and composed of 16 items, all of which were in the multiple-choice format

Experimental Texts

They were three short passages found to be appropriate for this study and selected online from the website "English for Everyone.Org© 2008". The first was, "City Girl" composed of 491 words in total, and 22 ULIs, all were content words. It followed by 28 Multiple Choice Questions (MCQs) of which 18 aimed to measure the vocabulary and the remaining 10 used to assess the test takers' reading comprehension ability. Of the total questions, the first 11 vocabulary and 5 reading comprehension items (marked by uppercase H letters in the questionnaires) that drew on the 13 ULIs boldfaced in the first paragraph assigned to the high-distribution subgroup. The last 7 vocabulary and 5 reading comprehension items (marked by uppercase L letters in the questionnaires) further relied on the 9 ULIs boldfaced in the next two paragraphs. This assessment took 20 minutes. The second episode of the experimental texts given to the participants in the density subgroups at the IAUN, 49 days after the distribution test took place at the CMU. This treatment comprised two separate short passages both of which were administered to the density subgroups simultaneously. The first passage entitled "The Mini Problem" that contained 337 words of which 10 items were ULIs. There were, however, other words underlined or flanked intentionally by quotation marks in the second paragraph. It was selected for the low-density subgroup and succeeded with 16 MCQs including 10 grammar/vocabulary and 6 reading comprehension questions. The second passage was employed for the high-density subgroup and contained 435 words in total, of which 21 were ULIs that followed by 25 MCQs including 15 vocabularies and 10 reading comprehension questions. There were four words that were underlined or flanked by quotation marks in the text.

Statistical System

On checking for the results, a software package (IBM® SPSS® Statistics version 24) was employed for statistical computations.

Procedures

At first, the QPTs were given to the 87 students who primarily thought to be 90 when they were called upon for the project. These tests administered at IAUN, Iran, and CMU, Iran, before launching the main experiments. The first experimental test was given to either distribution subgroups at the CMU ten days later on the first QPT.

Results

To start with, every raw score in both low and high subsets of the density and distribution groups multiplied by 100 each and divided by the total number of the questions in each test to obtain statistically measurable and homogenous input. Since there were two experimental groups and to ensure that the between-subgroup (low and high) probable differences were not due to chance yet enough sufficient to help reject the null hypotheses, the scores obtained from the QPTs, which were administered to the four subgroups typed into the software and the Descriptives icon was selected to calculate the raw data gathered. Table 1 displays this package-driven statistics.

Table 1. *Descriptive Statistics for Subgroups' QPTS*

Low-density		High-density		Low-distribution		High-distribution		ANOVA	
M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*F*	*p*
51.20	1.89	51.06	1.75	50.33	1.54	51.00	1.69	.214	.645

To ensure for homogeneity of the variances, the Levene's Test was used. Table 2 depicts the outputs for both the CMU and IAUN sample groups.

Table 2. *Homogeneity of the Variances for CMU & IAUN*

Levene's Statistics	*df1*	*df2*	*Sig.*
.034	1	85	.854

Note. CMU: Chabahar Maritime University; IAUN: Islamic Azad University of Najafabad

Table 1 reveals the *F* value (1, 85) = 0.214, and Table 2 shows the *p* value (.854), which is greater than the alpha level ($p > .05$), one that enables us to ensure that the four subgroups' mean scores on the QPTs are enough close to each other (there is a trivial difference, however) or they have equal variances as well.

Table 3. *Descriptive Statistics for the Main Groups' QPTS*

Proficiency	*N*	*M*	*SD*	*SEM*	95% Confidence Interval for Mean			
Group					L. Bound	U. Bound	Min.	Max.
CMU	45	**50.86**	1.73	0.25	50.34	51.38	48.00	54.00
IAUN	42	**50.69**	1.81	0.27	50.12	51.25	48.00	54.00
Total	87	50.78	1.76	0.18	50.40	51.15	48.00	54.00

The boldfaced mean scores in Table 4.3 show the similar performances of the main groups on the QPTs.

Table 4. *Statistics for Density Subgroups*

Subgroups	*n*	*M*	*SD*	*SEM*
Low	15	**82.91**	8.98	2.31
High	15	**72.00**	8.14	2.10

Table 4 shows a marked difference between the low-density subgroup performance (82.91) and the high-density subgroup performance (72.00) on tests for measuring the participants' lexical inferencing. In other words, the low subgroup has outperformed the high subgroup and as a result, the first null hypothesis should be rejected for the empirical evidence that was available after the administrations.

Table 5. *Independent-Samples T-Test for Density Subgroups*

Levene's Test	T-Test for Equality of the Means	95% C. I. of the Difference

	F	*Sig.*	*t*	*df*	*Sig.*(2-tailed) *p*	*M Diff.*	*SED*	Lower *p*	Upper
Equal V. Assumed	.536	.470	3.487	28	.002	10.91	3.13	4.50	17.32
E. Variances not Assumed			**3.487**	27.73	**.002**	10.91	3.13	4.50	17.33

Table 6. *Independent-Samples T-Test for Distribution Subgroups*

Levene's Test	T-Test for Equality of the Means						95% C. I. of the Difference		
	F	*Sig.*	*t*	*df*	*Sig.*(2-tailed) *p*	*M Diff.*	*SED*	Lower *p*	Upper
Equal V. Assumed	1.515	.229	2.13	28	.042	11.40	5.34	.455	22.34
E. Variances not Assumed			**2.13**	26.42	**.042**	11.40	5.34	.425	22.37

Table 7. *Statistics for Distribution Subgroups*

Distribution	*n*	*M*	*STD*	*SEM*
RC Low	15	**73.88**	16.32	4.21
RC High	15	**62.48**	12.72	3.28

Note. RC: Reading Comprehension

According to the statistics that obtained for the second hypothesis and the sample mean scores that had been drawn from Table 4.7 a marked difference is observable between the low-distribution subgroup performance (73.88) and the high-distribution subgroup performance (62.48) on tests for the assessment of the learners' RCA.

Discussion

Answer to the First Question

For density, as the amount of *t* value (3.487) reported in Table 5 was significant with the probability 0.002 and since this value (.002) was less than the alpha level ($p < .05$); we must then reject the null hypothesis. This was one that assumed there was no difference between the two subsamples, while the results now assert that the "between subgroup difference" is statistically significant beyond 1 percent level for low and high subsets.

As mentioned earlier, there are factors with the propensity to hinder or even inhibit the readers' successful inferencing behaviors. They are, to a certain degree, apt to deter the readers' comprehension, especially the times when a ULI's role is heightened in a text. Further, such unknown items may only depend on their own propositional semantic features, the less accessible contextual clues; a measure that can facilitate triggering the inference of meaning. Besides, this would be cognitively more demanding for the learners to capture the essence of the context, particularly when a combination of these factors go together and cause more complications to the task of inferencing.

Of these, one that is somehow more challenging is contextual clues that are of vital importance to the inferencing. These can become thornier especially when they get packed into a chain of words or even in a word alone, particularly in the adjacency/subjacency of a ULI, one whose meaning is still obscure by itself and can get readers caught into a vicious circle when they will come across inferencing. Neither the last nor the least is the participants' vocabulary knowledge and the matter that how wide and deep it should be for every individual's inferencing attitude. It is obvious that the vocabulary size is pivotal to the successful RCA and the more

extensive it is a broader coverage it can then provide to tackle the ULIs in a text. Therefore, participants with a more comprehensive account of the context and a higher coverage of the vocabulary, which is required for inferencing, would be more successful in grasping the global meaning that might have remained implicit within the ULIs that scattered in a text. This is particularly feasible for words that are close to an unknown word or one that its meaning is rather ambiguous to the reader. By and large, the readers' vocabulary knowledge can influence the number and the occurrence pattern of ULIs in a passage.

From the preceding lines, this can be concluded that the aforementioned factors are apt to affect the readers' inferencing activities. Of these, for instance, the prior vocabulary knowledge can be of a big concern to the readers, especially when it coacts reciprocally with other factors like the length of a text. Even more, they can all go together as contributory factors to affect such variables as density or distribution of ULIs found in a short passage. Therefore, as far as the research concerns, the first null hypothesis designed to maintain, "text density has no effect on Iranian EFL learners' successful RCA" is considered faulty and should then be rejected in favor of the alternative H1. To ensure that there is little room for doubting the significance of the concept that was hypothesized above, it requires, though providing clear evidence to support findings that obtained from the analyses.

According to the studies that fall into the scope of this research, a higher density of ULIs tends to affect the learners' successful comprehension, particularly those who might be most prone to deviate from the legitimate inferencing under the influence of such factors that found detrimental to the process. If go together, these can compound the comprehension insofar as their concurrence has turned out to inhibit the progress. As mentioned before, several researchers worked on the malign effects that these factors could impose on the L2 readers' lexical inferencing.

For instance, Laufer (1997) emphasized the essential role of language threshold, lexical items, and knowledge about the subject matter that could affect the comprehension of a text. She and Sim (1985a, 1985b) also found the superiority of words, what the background knowledge, to a lesser extent, relies on, and "the syntax which is almost, disregarded".

Nassaji (2006) also insisted on vocabulary depth and its strong association with successful inferencing. Others further provided evidence about the effect of vocabulary proficiency and size on readers' inferencing behaviors (Sternberg, 1987; Dubin & Olshtain, 1993; Fraser, 1999; Paribahkt & Wesche, 1999; Ames, 1966).

Answer to the Second Question

For distribution, the alternative H2 was substantiated and the null hypothesis was then refuted thereupon. Then again, the amount of *t* value (2.13) was significant with the probability 0.042 and the reported *p* value (.042) found in Table 6 was less than the alpha level ($p < .05$). As a result, the null hypothesis must be rejected one that assumed there was no difference between the two sample mean scores or likewise, the variances of two subgroups in the computation, which tells us that the "between subgroup difference" is statistically significant beyond the 5 percent level for the distribution subsets of low and high. Broadly speaking, the high-distribution of ULIs, to a certain extent, hinders lexical inferencing while the low-distribution of such items unlike does not.

Distribution or the ULIs' occurrence pattern, likewise density, turned out to affect the L2 learners' achievement on lexical inferencing. The advocates of this premise such as Nation (2001) and Curtis (1987) maintained that the high concentration of the unknown words likely proved to hamper severely the L2 readers' comprehension. When time matters, it is then not

worth taking efforts to consult a dictionary for such items, which can be "narrow in range, less frequent, and low in probability of being met in a text soon again" (Liu & Nation, 1985), therefore, "the only way of handling them is to stay and seeing their occurrence therein" (p. 33).

That aside, the second problem that L2 readers may face in trying to comprehend a text occurs when they come across "words they think they know", what Laufer (1997) termed as the misinterpretations of the Deceptively Transparent Words. This takes place whenever L2 learners are unaware of the ULIs' presence in the text. In fact, they misconstrue the existence of an unknown word, then, mistakenly recognize it as familiar, and pick up a meaning that is pragmatically irrelevant to the item in question. As a result, learners may skip over such a ULI in the sense that it is familiar and consequently fail to assign proper meaning to it. Assigning wrong meaning to such words is just the beginning of the process where it goes on with the distortion of the text's overall perception. It makes the matter further complicated when these misinterpreted items used as contextual clues for the inference of other ULIs in the proximity that they had already remained ambiguous on their own to the readers who might decide to guess them from the context (Laufer, 1997, p. 27).

The contextual clues (Sternberg, 1987) that embedded in deceptive words, particularly when they are implicit in such words close to ULIs they can keep readers confused and sometimes making the wrong choices. The advocates in earlier studies (Qian, 1999; Nation, 2001; Stahl, 2003) have pointed out the role of prior vocabulary knowledge, which can definitely serve as a strong indication where the higher depth and breadth of L2 learners' vocabulary well incorporate to the ULIs' distribution pattern in a written text.

There might still be other variables that could have influenced the participants' inferential performances, ones that are experimentally difficult to control, however. One is, for example, the degree and depth of the reader's engagement with the text that they have studied. Mishan (2005) found "engagement" an essential factor to successful learning (Harmer, 1996, p. 11) and as an emotional state that presupposes some degree of empathy with the topic that readers may come across in a text. This contextual interaction is referred to as transaction, a cognitive process through which learners reach out beyond the self to others (Brown, 2000). It subsumes different types of variables (p. 153) such as acculturation, Personality, and empathy, the last which is an emotional process that individuals may involve in by reaching out beyond the self and appreciating what another person understands or feels (Brown, 1994).

Conclusion

This study concerned exploring the possible impact of the density and distribution of ULIs on Iranian EFL learners' RCA. It further focused on the GMC, as a powerful strategy that learners could utilize to infer ULIs they may encounter in a given text. The researcher conducted this study to test the two alternative hypotheses that were addressed under the categories of density and distribution. Findings revealed that the high density and distribution of the ULIs were detrimental to the EFL learners' lexical inferencing. In other words, participants in either low subgroups of density and distribution outperformed their counterparts in high subgroups in the first and in the second experimental tests respectively. Findings also showed that the higher the prior vocabulary size, the lower the density and distribution of ULIs and thus more successful the learners' lexical inferencing in the text. Vocabulary size found a good predictor of density and distribution of ULIs where it could control the number of difficult items and the degree of success that learners might attain in their RCAs.

The findings of this study can serve the EFL teachers to initiate their learners mastering strategies like GMC while keeping them practice vocabulary activities in the classroom. Teachers

can do this by associate learners through training sessions and offering them skills of such type in advanced or upper intermediate levels, as well as try to find and reintroduce some sort of strategies that best suit their learners' pedagogical requirements, especially ones that assist them achieving success in comprehension. The author, in the end, feels thoroughly obliged to point out, however, that until further research has been done and larger numbers of subjects being studied to reach a higher level of significance of these preliminary findings; any result or statement that presented in this work is speculative and needs more investigation.

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