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INVESTIGATING SOCIO-LINGUISTIC FACTORS AND THE EXPLOITATION OF CONTEXTUAL CLUES TO INFER WORD MEANINGS THROUGH READING

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Abstract

This quasi-experimental study attempts to determine the influence of socio-linguistic factors on the exploitation of contextual clues for EFL unknown/unfamiliar word meaning inferencing in reading. The socio-linguistic factors concern learners' age, EFL learning duration, first language use duration, first language use frequency, first language reading ability, first language reading inability. The investigated contextual clues are synonymous clues, antonymous clues, morphological/derivational clues, definitional/ paraphrasal/ restatement clues, example/explanation clues, French-related clues, thematic/collocational clues. A socio-linguistic background questionnaire, a pre-test and a post-test are the data collection instruments. A sample of 110 secondary school students divided into experimental (55) and control (55) groups are involved in this study. Composed of Lower-sixth formers/SHS2 students, respondents were chosen through a simple and single-stage sampling technique called quota sampling technique considering the students' alphabetical list. The data are analysed quantitatively by means of the Statistical Package in Social Services (SPSS), version 17.0 (2008). The results indicate that socio-linguistic factors enumerated above do not influence the exploitation of contextual clues for unknown/ unfamiliar word meanings inferencing during the activity of reading.

Keywords: *Socio-linguistic factors, age, EFL learning, first language, clues, vocabulary teaching/learning, word meaning, reading*

Rezumat

Prin acest studiu cvasi-experimental, încearcăm să determinăm influența factorilor sociolingvistici asupra exploatării indiciilor contextuale pentru deducerea sensului cuvintelor necunoscute/nefamiliare în timpul lecturii. Factorii sociolingvistici sunt vârsta elevilor, durata de învățare a limbii engleze, durata de utilizare a limbii materne, frecvența de utilizare a limbii materne, capacitatea sau incapacitatea de a citi în limba maternă. Indiciile contextuale

sunt sinonimia, antonimia, morfologia/derivația, definiția/parafraza, exemplele/ explicațiile, indiciile în limba franceză și indiciile tematice/alocarea. Un chestionar, un pre-test și un post-test au servit drept instrumente de colectare a datelor. Eșantionul este format din 110 elevi de liceu, împărțiți în grupe experimentale (55) și de control (55). Tehnica de eșantionare a fost tehnica simplă cu un singur pas sau tehnica cotei, având în vedere lista alfabetică a elevilor. Datele cantitative au fost analizate folosind software-ul SPSS (2008), versiunea 17.0. Rezultatele au relevat faptul că factorii sociolingvistici citați mai sus nu influențează exploatarea indiciilor contextuale pentru deducerea sensului cuvintelor necunoscute/ nefamiliare în timpul lecturii.

Cuvinte-cheie: *factori sociolingvistici, vârstă, învățarea limbii engleze ca limbă străină, limbă maternă, indicii, predarea/învățarea vocabularului, sensul cuvintelor, lectură*

Introduction

Our observation of second/foreign language teaching can reveal that vocabulary constitutes one of the major problems of learning. The problem is also existent in the environment of this study because, according to the results of a preliminary work, 44.9% of EFL teachers pointed out vocabulary as their students' major language learning problem.

Vocabulary knowledge is important for reading comprehension. Students cannot decipher the message of a text without a minimum vocabulary knowledge. It is estimated that, in English for example, at least 8,000 to 9,000 word families are needed for the comprehension of a written text and around 6,000 to 7,000 are need for the comprehension of spoken language (Joseph et al., 2009). Knowing that the meanings of some words in written texts are inaccessible, the writer implicitly provides the reader with clues that help him/her decode these word meanings. Surprisingly, many EFL learners as readers are not aware of the presence of these clues in the text. Consequently, they encounter vocabulary difficulties when reading a text.

The purpose of the study is to familiarize the EFL learners with contextual clues. A quasi-experimental study has been implemented on word meaning inferencing process based on text reading, with special interest in the effect of socio-linguistic factors on the exploitation of these contextual clues. The study attempted to find out whether socio-linguistic factors do not influence the exploitation of the contextual clues for the understanding of unknown/unfamiliar word meanings. Learners' age, their EFL learning duration, the duration of using L1, the frequency of using L1, the abilities and inabilities of reading L1 are considered as relevant socio-linguistic factors. The contextual clues are synonymous clues, antonymous clues, morphological/derivational clues, definitional/paraphrasal/restatement clues, example/explanation clues, French-related clues, thematic/collocational clues. The overall work, first, starts with the literature review and the theoretical frame. It, then, goes through with the research methodology up to the results and discussions.

1. Literature Review and Theoretical Framework

The problem of the vocabulary is so serious that it creates an obstacle for most readers (Shen, 2013; Ostovar and Malekpur, 2015; Niwa, 2019). It often results in lack of self-esteem (Khalui & Langroudi, 2016), and hinders second/foreign language learners' proficiency as they need a large pile of vocabulary items in order to communicate successfully (Tajik, 2018; Nematollahi et al., 2017).

As students read and keep processing words to interpret meaning, vocabulary affects their comprehension of the text (Senoo and Yonemoto, 2014) because they have to cope with many unfamiliar words (Riska et al., 2019). The comprehension of what students read about depends on the knowledge of the majority of the words (Daugaard et al., 2017; Aldukhayel, 2014; Riska et al., 2019). Strategic vocabulary teaching is another issue because one method or technique which works for one learner in a specific condition and setting may not work for the same learner in another condition or different setting (Yazdi and Kafipour, 2014). According to Nematollahi et al. (2017), the results of different studies have revealed that different learners prefer different strategies. Pretorius (2000) noticed differences amongst adult learners with regard to the strategies they adopted for vocabulary learning.

No research has come up with consensus results about the most efficient vocabulary learning strategies (Nematollahi et al., 2017). Kispal (2008) argued that with little exception, research has not explored the methods of inference training that are appropriate to different ages or abilities. Ma (2014) remarked that more efforts/strategies are needed to discover new word forms and find out their meanings, while less efforts/strategies are made by learners in mapping the word forms with meanings and consolidating the newly learnt words. Considering that consensus cannot be reached among researchers because of the actual number and stages involved in vocabulary learning (Ma, 2014), there is a need to conduct a research investigating the effect of sociolinguistic factors including the inferential approach to vocabulary learning based on the exploitation of contextual clues through reading.

In terms of theory, this study uses the inferential approach to vocabulary learning including Oxford and Crookall's (1990) fully contextualizing strategies. This theory dates back to the 1980s (Kispal, 2008) and is grounded in the constructionist theory which accounts for the knowledge-based inferences that are constructed when readers attempt to comprehend a narrative text (Graesser et al., 1994). The inferential approach to vocabulary learning also indicates that learners can gain self-reliance in the process of vocabulary learning (Ahmad et al., 2018) assuming that in reading comprehension, they show ability in specific inferencing skills such as inferring word meanings from context (Pretorius, 2000). Current theories of reading also assume that dur-

ing the comprehension process, readers construct a coherent mental representation of the meaning of the text (Pretorius, 2000) and that the quick and great expansion in children's language at school might be explained by the vocabulary acquired through extensive reading, thus, reading is viewed as the first stage involved in vocabulary mastery (Suziki, 2016). As applied to this study, the inferential approach to vocabulary learning accounts for the exploitation of contextual clues to infer the meanings of unknown/ unfamiliar words during the reading of a text.

2. Methodology

2. 1. Research Site and Population

This quasi-experimental study was conducted in Boussé, the headquarter of the Kourwéogo province in 'la Région du Plateau Central', Burkina Faso, a West African country. Two secondary schools, located in Boussé, a predominantly Mooré-speaking area, were selected purposively and conveniently. The study population was composed of 118 students who were learning English as foreign language and they had already spent at least 6 years learning it. These students were composed of 26 non-repeaters and 33 repeaters in the experimental group. The control group was represented by 13 non-repeaters and 46 repeaters. Their ages range between 16 and 24 years. As students of the Arts option, they speak French (L2/second language) in addition to their first languages. They were very familiar with reading comprehension which is the main task to perform during the treatment.

2. 2. Sampling Technique

The sample population was restricted to lower sixth formers (SHS2 students) doing the Arts option. These students were chosen through a simple and single-stage sampling technique, also called quota sampling technique, by considering their alphabetical list. It is one of the techniques used to determine a sample from the population which has certain criteria in a defined amount. With an error margin of +/– 4%, a confidence error of 95%, and a 50/50 chance that the sample contained our characteristics, we arrived at 110 as a global sample of student-participants. That global sample was, then, divided into 2 groups corresponding to 55 participants in the experimental group and 55 participants in the control group.

As far as the socio-linguistics are concerned, there were 23 students aged between 16 and 19 in each of the two groups (experimental and control). There were also 29 students aged between 20 and 24 in each of the two groups. For the EFL learning duration, there were 13 students who had spent 6 years in EFL learning in each of the groups. There were also 13 students who had spent more than 6 years in EFL learning in each of the groups. In each of the two groups, fifty-two students have been using their L1 since birth. In each of the two groups, whereas 28 students have been

using their L1 very frequently, 8 of them have been using their L1 frequently. Thirteen students, in each of the two groups, could read their L1 and 31 students could not read.

2. 3. Research Materials and Instruments

The materials of the study were 14 vocabulary lesson plans based on contextual clues and text reading, 14 classical vocabulary lesson plans, 14 selected reading texts and 7 formative vocabulary tests. The research instruments were a sociolinguistic questionnaire adapted from Alahmadi and Foltz (2020), a pre-test, and a post-test adapted from Pretorius (2000). The socio-linguistic background questionnaire was used to collect socio-demographic information from which the socio-linguistic factors were identified. As for the pre-test and post-test, they served to measure the participants' performance of lexical inferencing. They could generate quantitative data in relationship with each of the 7 contextual clues. The pre-test and post-test were graded over 20 because they were composed of eight paragraphs containing one unknown/unfamiliar word each. The grading consisted in giving 1.5 marks for each correct meaning inferred and 1 mark for providing the right contextual clue that served for the word meaning inferencing. The pre-test and post-test were rated by 2 different graders. Then, the sums of the 2 graders' marks on each copy of the pre-test and post-test were divided into 2 to have a final grade. The rationale for having two graders was to reach objectivity during the grading.

The unknown/unfamiliar words in the reading texts, and in the pre-test and post-test were selected on the basis of the Oxford's (2000) levels of vocabulary. We also referred to Cambridge English Preliminary for School: Handbook for teachers (2015) to check the levels of the targeted vocabulary words selected as unknown/unfamiliar words. Except for one word which is part Level A2, the rest of the words are suitable for learners at B1, B2, and C1 levels. Levels A1 and A2 correspond to beginners, B1 and B2 levels to intermediate, and C1 and C2 level to advanced learners. In the context of this study, 1ère A students (lower-sixth formers/SHS2 students) are advanced learners. Therefore, the vocabulary units they need to know are part of B1, B2, and C1 levels.

2. 4. Treatment and Data Collection Procedures

The treatment consisted in placing the experimental group and control group in two different vocabulary learning conditions. The experimental group was trained how to infer the meanings of unknown/unfamiliar words using contextual clues. The vocabulary lesson plans based on text reading were used with this group. During the treatment and even when performing the follow-up activities, the participants were forbidden to consult dictionaries or ask for the meanings of the unknown/unfamiliar words their teacher or

peers. The participants in the control group learnt unfamiliar vocabulary words which were withdrawn from the texts and taught in isolation through the classical vocabulary lesson plans. The meanings of the words were provided by the teacher as the contents of the lessons. The only difference was that they could ask their teacher and peers questions or consult dictionaries. The participants of the control group received the texts at the end of the classes for reading them at home. The treatment took place from October 25th 2021 to January 21st 2022 and lasted 7 weeks.

2. 5. Methods of Data Analysis

The data were analysed quantitatively using comparative statistics with special focus on the mean scores of the experimental group and control group. It was necessary to run both an intergroup and intragroup analyses. The SPSS (Statistical Package in Social Services) software version 17.0 (2008) was deployed for the data analysis. The rationale for carrying out intergroup and intragroup analyses was to have insights on the influence of the sociolinguistic factors on the exploitation of contextual clues for word meaning inferencing during the reading of a text. The variables were learners' age, EFL learning duration, the duration of using L1, the frequency of using L1, the ability of reading L1, the inability of reading L1. These variables were the factors suspected to influence the exploitation of contextual clues for word meaning inferencing during the reading activity. The units of measurement were the marks obtained by the participants in the experimental group and control group.

3. Results

3. 1. Intergroup Analysis of the Data on the Influence of Sociolinguistic Factors

3. 1. 1. Age and Exploitation of Contextual Clues in Reading

Age [16 - 19]	Number	Experimental group				Control group			
		Minimum	Maximum	Mean	Standard Deviation	Minimum	Maximum	Mean	Standard Deviation
Pre-test	23	.00	6.00	2.5326	1.96316	.00	5.50	2.5435	1.28729
Post-test	23	.00	7.50	3.9783	1.77404	.00	4.00	2.4892	1.07258

Table 1: *The Results of Participants Aged between 16-19*

The mean scores in the pre-test of participants aged between 16 and 19 are 2.5326 for the experimental group and 2.5435 for the control group. The mean scores of the two groups being approximately similar in the pre-test, insinuates that the participants aged between 16 and 19 had an approximate similar average level before the treatment. In the post-test, the mean score of the experimental group considerably increased up to 3.9783 and that of the

control remained approximately the same (MS = 2.4892). The fact that the mean score of the control group remained approximately constant shows that the increase of the mean score of the experimental group in the post-test did not result from the participants' age. As a result, age does not influence the use of contextual clues for the understanding of the meanings unknown/unfamiliar words in reading comprehension.

Age [20 - 24]	Number	Experimental group				Control group			
		Minimum	Maximum	Mean	Standard Deviation	Minimum	Maximum	Mean	Standard Deviation
Pre-test	29	.00	5.50	2.3621	1.29488	.00	4.50	2.0345	1.31564
Post-test	29	.00	7.50	3.6724	1.76916	.00	5.00	2.1983	1.69345

Table 2: *The Results of Participants Aged between 20-24*

The mean scores in the pre-test of participants aged between 20 and 24 are 2.3621 for the experimental group and 2.0345 for the control group. There is no significant difference between the mean scores of the two groups in the pre-test. This suggests that the participants aged between 20 and 24 also had an approximate similar average level before the treatment. In the post-test, the mean score of the experimental group considerably increased up to 3.6724 and that of the control is approximately the same (MS = 2.1983). The more or less constant mean score of the control group insinuates that the significant increase of the mean score of the experimental group in the post-test did not derive from the participants' age. Therefore, age does not influence the exploitation of contextual clues for the understanding of the meanings of unknown/unfamiliar words in reading.

3. 1.2. EFL Learning Duration and Exploitation of Contextual Clues in Reading

6 years of EFL learning	Number	Experimental group				Control group			
		Minimum	Maximum	Mean	Standard Deviation	Minimum	Maximum	Mean	Standard Deviation
Pre-test	13	.00	6.00	1.9231	1.89128	.00	4.00	2.1154	1.47414
Post-test	13	1.00	6.50	3.6538	1.80721	.00	6.00	2.8462	1.66314

Table 3: *The Results of Participants with Six Years of EFL Learning*

The data were analysed, in this section, looking at the results in relation to the participants who spent six years in EFL learning. In the pre-test, the mean scores of the experimental group and control group are 1.9231 and 2.1154 respectively. There is no significant difference between the two groups and this ensures that the participants had approximately the same level before the treatment. In the post-test, the mean score of the experimental group evolved considerably from 1.9231 to 3.6538 but that of the control

group slightly evolved from 2.1154 to 2.8462. Whereas the progress from the pre-test to the post-test for the experimental group is significant, it is insignificant for the control group. The insignificant progress of the control group in the pre-test and post-test demonstrates that the significant progress of the experimental group in the post-test did not derive from the number of years spent for learning English as foreign language. Therefore, EFL learning duration does not influence the use of contextual clues for the understanding of the meanings of unknown/unfamiliar words in reading.

More than 6 years of EFL learning	Number	Experimental group				Control group			
		Minimum	Maximum	Mean	Standard Deviation	Minimum	Maximum	Mean	Standard Deviation
Pre-test	28	.00	5.75	2.3839	1.47743	.00	4.00	2.3929	1.10014
Post-test	28	1.50	7.50	4.1429	1.65472	.00	5.50	2.2679	1.50912

Table 4: *The Results of Participants with More Than Six Years of EFL Learning*

For the analysis of the data considering the participants who spent more than six years in EFL learning, the results indicate that the mean scores of the experimental group and control group are 2.3839 and 2.3929 respectively in the pre-test. There is no significant difference between the two groups. This ensures that the participants had approximately the same level before the treatment. The mean score of the experimental group increased from 2.3839 to 4.1429 and that of the control group slightly decreased from 2.3929 to 2.2679 in the post-test. Whereas the progress in the experimental group is significant, it is approximately constant in the control group. The fact that the mean score of the control group remained approximately constant in the pre-test and post-test, but that of the experimental group progressed significantly in the post-test, demonstrates that the experimental group did not progress because of the number of years spent in EFL learning. Therefore, EFL learning duration did not influence the use of contextual clues for the understanding of the meanings of unknown/unfamiliar words in reading.

3.1.3. First Language Use Duration and Exploitation of Contextual Clues in Reading

Using L1 since birth	Number	Experimental group				Control group			
		Minimum	Maximum	Mean	Standard Deviation	Minimum	Maximum	Mean	Standard Deviation
Pre-test	52	.00	6.00	2.2837	1.70282	.00	6.50	2.3654	1.48230
Post-test	52	.00	7.50	4.0577	1.70827	.00	6.50	2.5288	1.77927

Table 5: *The Results of Participants Using First Language since Birth*

The results of the analysis of the data considering the participants' L1 use duration, in dicate that the mean scores of the experimental group and control group are 2.2837 and 2.3654 respectively in the pre-test. The mean score (MS = 2.2837) of the experimental group and the mean score (MS = 2.3654) of

the control group are more or less similar. This shows that the two groups had approximately the same level before the treatment. The mean score of the experimental group moved from 2.2837 to 4.0577 in the post-test. However, that (MS = 2.5288) of the control group remained more or less constant in the post-test. The fact that the mean score of the control group remained more or less constant in the pre-test and post-test but that of the experimental group got higher in the post-test implies that L1 use duration has no link with the outperformance of the experimental group. Therefore, L1 use duration does not influence the exploitation of contextual clues for the understanding of the meanings of unknown/unfamiliar words in reading.

3.1.4. Frequency of First Language Use and Exploitation of Contextual Clues in Reading

Using L1 very frequently	Number	**Experimental group**				**Control group**			
		Minimum	Maximum	Mean	Standard Deviation	Minimum	Maximum	Mean	Standard Deviation
Pre-test	28	.00	4.00	2.1250	1.36507	.00	6.50	2.2857	1.61262
Post-test	28	.00	7.50	3.5179	1.71854	.00	6.50	2.2589	1.97611

Table 6: *The Results of Participants Using First Language Very Frequently*

The results of the participants who use their L1 very frequently showed that the mean scores of the experimental group and control group are 2.1250 and 2.2857 respectively in the pre-test. The mean score (MS = 2.2837) of the experimental group and that (MS = 2.3654) of the control group are more or less similar. This suggests that the two groups had approximately the same level before the treatment. The mean score of the experimental group evolved to 3.5179 in the post-test. However, that (MS = 2.2589) of the control group remained more or less constant in the post-test. The fact that the mean score of the control group remained more or less constant in the pre-test and post-test shows that the increase of the mean score of the experimental group in the post-test was not due to the participants' very frequent use of their L1. Therefore, using L1 very frequently does not influence the use of contextual clues in the understanding of the meanings of unknown/ unfamiliar words in reading.

Using L1 frequently	Number	**Experimental group**				**Control group**			
		Minimum	Maximum	Mean	Standard Deviation	Minimum	Maximum	Mean	Standard Deviation
Pre-test	8	.00	4.50	2.4375	1.59099	2.00	5.00	3.4375	.94255
Post-test	8	2.00	6.50	4.2500	1.62569	1.50	6.00	3.6565	1.50559

Table 7: *The Results of Students Using First Language Frequently*

The results of the participants who use the L1 frequently indicated that the mean scores of the experimental group and control group are 2.4375 and

3.4375 respectively in the pre-test. The mean score (MS = 2.2837) of the experimental group is lower than that (MS = 3.4375) of the control group in the pre-test. This suggests that the control group was more predisposed to guessing word meanings relying on context. Surprisingly, the mean score of the experimental group increased up to 4.2500 in the post-test. Meanwhile, that (MS = 3.6565) of the control group remained more or less constant in the post-test. The fact that the mean score of the control group remained more or less constant in the pre-test and post-test shows that the increase of the mean score of the experimental group in the post-test was not due to the participants' frequent use of their L1. Therefore, using L1 frequently does not influence the use of contextual clues for the understanding of the meanings of unknown/unfamiliar words in reading comprehension.

3.1.5. L1 Reading Ability and Exploitation of Contextual Clues in Reading

L1 reading ability	Number	Experimental group				Control group			
		Minimum	Maximum	Mean	Standard Deviation	Minimum	Maximum	Mean	Standard Deviation
Pre-test	13	.00	6.00	2.3462	2.14461	.00	4.00	2.1154	1.24422
Post-test	13	.00	6.50	3.6923	2.00560	.00	4.50	2.1154	1.68206

Table 8: *The Results of Participants with L1 Reading Ability*

The results of the participants with the ability to read L1 showed that the mean score of the experimental group is 2.3462 and that of the control group is 2.1154 in the pre-test. The mean score (MS = 2.462) of the experimental group and that (MS = 2.1154) of the control group are more or less similar. This implies that the two groups had approximately the same level before the treatment. The mean score of the experimental group changed into 3.6923 in the post-test. However, that (MS = 2.1154) of the control group remained quite constant in the pre-test and post-test. The fact that the mean score of the control group remained quite constant in the pre-test indicates that the increase of the mean score of the experimental group was not due to the participants' ability to read their L1. Therefore, the ability of reading L1 does not influence the use of contextual clues for the understanding of the meanings of unknown/unfamiliar words in reading.

L1 reading inability	Number	Experimental group				Control group			
		Minimum	Maximum	Mean	Standard Deviation	Minimum	Maximum	Mean	Standard Deviation
Pre-test	31	.00	5.50	2.2903	1.34644	.00	6.50	2.6613	1.47415
Post-test	31	1.50	7.50	4.0806	1.66882	.00	6.00	2.4274	1.67729

Table 9: *The Results of Students with L1 Reading Inability*

The results of the participants regarding their inability to read L1 showed that the mean score of the experimental group is 2.2903 and that of the control group is 2.6613 in the pre-test. The mean score (MS = 2.2903) of the experimental group and that (MS = 2.6613) of the control group are more or less similar. This implies that the two groups had approximately the same level before the treatment. The mean score of the experimental group increased up to 4.0806 in the post-test. However, that (MS = 2.4274) of the control group remained more or less constant in the pre-test and post-test. Constance in the mean score of the control group in the pre-test and post-test indicates that the increase of the mean score of the experimental group was not due to the participants' inability to read their L1. Therefore, the inability of reading the first language does not influence the use of contextual clues for the understanding of the meanings of unknown/ unfamiliar words in reading.

3.2. Intragroup Analysis of the Results on the Influence of Sociolinguistic Factors

3.2.1. Age and Exploitation of Contextual Clues in Reading

Age intervals	Number	Experimental group							
		Age [16 - 19]				Age [20 - 24]			
		Minimum	Maximum	Mean	Standard Deviation	Minimum	Maximum	Mean	Standard Deviation
Pre-test	23	.00	6.00	2.5326	1.96316	.00	5.50	2.5000	1.38170
Post-test	23	.00	7.50	3.9783	1.77404	.00	6.50	3.1957	1.60070

Table 10: *The Results of Participants Aged 16-19 and 20-24*

The intragroup analysis shows that the mean scores of the participants aged between 16-19 and that of those aged between 20 and 24 are 2.5326 and 2.5000 respectively in the pre-test. There is no significant difference between the mean scores of the two groups in the pre-test. This implies that the participants aged between 16 and 19 and those aged between 20 and 24 also had an approximate similar level before the treatment. The analysis reveals that the mean score of the participants aged between 16 and 19 evolved to 3.9783 and that of the participants aged between 20 and 24 also evolved to 3.1957 in the post-test. The difference between the mean scores (MS = 3.9783; MS = 3.1957) of the two age-groups is insignificant. Based on these results, it can be stated that participants' age does not influence the use of contextual clues for the understanding of the meanings of unknown/unfamiliar words in reading.

3.2.2. EFL Learning Duration and Exploitation of Contextual Clues in Reading

EFL Learning duration	Number	Experimental group							
		6 years of EFL learning				More than 6 of EFL learning			
		Minimum	Maximum	Mean	Standard Deviation	Minimum	Maximum	Mean	Standard Deviation
Pre-test	13	.00	6.00	2.3462	2.14461	.00	4.00	2.3077	1.18213
Post-test	13	1.00	6.50	3.6538	1.80721	1.50	7.50	3.7308	1.71532

Table 11: *The Results of the Participants with 6 Years and More Than 6 Six of EFL Learning*

The intragroup analysis indicates that the mean score of the participants who spent 6 years learning EFL and that of those who spent more than 6 years learning EFL are 2.3462 and 2.3077 respectively in the pre-test. There is no significant difference between the mean scores of the two groups in the pre-test suggesting that the participants who spent 6 years learning EFL and those who spent more than 6 years learning EFL had an approximate similar level before the treatment. The mean score of the participants who spent 6 years learning EFL increased up to 3.3538 and that of the participants who spent more than 6 years learning EFL also increased up to 3.7308 in the post-test. The difference between the mean scores (MS = 3.3538 and MS = 3.7308) of the two groups of participants is insignificant. These results prove that EFL learning duration does not influence the use of contextual clues for the understanding of the meanings of unknown/unfamiliar words in reading.

3.2.3. First Language Use Frequency and Exploitation of Contextual Clues in Reading

Frequency of using first L1	Number	Experimental group							
		Very frequently				Frequently			
		Minimum	Maximum	Mean	Standard Deviation	Minimum	Maximum	Mean	Standard Deviation
Pre-test	8	.00	4.00	1.7500	1.64751	.00	4.50	2.4375	1.59099
Post-test	8	.00	5.50	2.8125	2.03430	2.00	6.50	4.2500	1.62569

Table 12: *The Results of Participants Using Very Frequently and Frequently L1*

The intragroup analysis reveals that the mean score of the participants who use their L1 very frequently and that of those who use L1 frequently are 1.7500 and 2.4375 respectively in the pre-test. The means of the first group was slightly lower than that of the second, presuming that the participants who use their L1 frequently were more predisposed to infer the meanings of unknown/unfamiliar words in reading than those who use L1 very frequently. In the post-test, the mean score (MS = 2.8125) of the participants who use their L1 very frequently did not significantly increase whereas that

(MS = 4.2500) of the participants who use their L1 frequently increased considerably. The considerable increase of the participants who use their L1 frequently indicates that frequency of using L1 affected the use of contextual clues for the understanding of the meanings of unknown/unfamiliar words in reading.

4. Discussion of the Results

The finding that age does not influence the exploitation of contextual clues for the understanding of the meanings of unknown/unfamiliar words in reading does not agree with those of Oxford (1990, 1994) who pointed out age as part of learning factors influencing the choice of language learning strategies in second language. The idea that EFL learning duration does not influence the exploitation of contextual clues for the understanding of the meanings of unknown/unfamiliar words in reading, becomes evident based on the fact that lexical inferencing is a good vocabulary learning strategy for fifth-formers/SHS1 students, lower-sixth-formers/SHS2 students, and upper-sixth formers/SHS3. The findings that the duration of using L1, the frequency of using L1, the ability and inability of reading L1 do not influence the use of contextual clues for the understanding of the meanings of unknown/unfamiliar words in reading do not correlate with those by Oxford (1990) who emphasized that nationality/ethnicity influence strategy use in second language learning. They are, seemingly, in line with those of Sournin (2010) who indicated that a creole language does not constitute any obstacle to the assimilation of English as a second language, but it rather plays a neutral role. The findings of this study imply that EFL teachers should train second cycle students/advanced learners (SHS1, SHS2, and SHS3 levels) whose EFL learning requires more reading than students of the first cycle (beginners/intermediate learners). It does not matter whether the students' age ranges between 16 and 19 or between 20 and 24. It does not matter whether they have spent 6 or more than 6 years learning EFL. The findings also insinuate that contextual clue as a vocabulary learning strategy is recommendable to second cycle students/advanced learners (SHS1, SHS2, and SHS3 levels), no matter the very frequent or frequent use of their L1, and no matter their ability or inability of reading L1. Experts such as (Oxford 1990, O'Malley and Chamot (1990) believe that vocabulary learning strategies should be taught to foreign language learners as tools to help them to become independent and efficient language learners.

Conclusion

With regards to the role of vocabulary in language learning, it was necessary to examine the effect of the socio-linguistic factors on the exploitation of contextual clues for a better learning of vocabulary in reading. This necessitated conducting a quasi-experimental study including 7 contextual clues.

The intergroup and intragroup analyses of quantitative data collected by means of a questionnaire, a pre-test, post-test after a treatment of 7 weeks, showed that socio-linguistic factors such as age, EFL learning duration, the duration of using L1, the frequency of using L1, the ability and inability of reading L1 do not affect the exploitation of contextual during reading comprehension. However, particular attention should be paid to the frequency of using L1 because the intragroup analysis indicates that it affects the exploitation of contextual clues in reading comprehension. These findings add to the general understanding of the complex nature of EFL lexical inferencing, and show the crucial importance of knowing the factors to be considered for successful inferencing of unknown/unfamiliar word meanings. The findings above need to be supported by a longitudinal experimental project. These findings also need to be supported by future studies which investigate the students' ability of deriving unknown word meanings in listening, since the data come unilaterally from a written pre-test and post-test.

References

Ahmad, S. N., Muhammad, A. M. and Kasim, A. A. M. (2018). Contextual Clues Vocabulary Strategies Choice among Business Management Students. *English Language Teaching*, 11(4), 107-116. http://doi.org/10.5539/elt.v11.

Aldukhayel, D. M. (2014*). The L2 Exposure Effect on Avoidance of Phrasal Verbs by Arab ESL Learners*. Thesis in partial fulfilment of the requirements for the Degree of Master of Arts Colorado State University. https://mountainscholar.org/_bitstream/handle/10217/82502/Aldukhayel_colostate_0053N_12220.pdf.

Al-Jamal, D. A. (2018). The role of linguistic clues in Medical Students' Reading Comprehension. *Psychology Research and Behaviour Management*, 11, 395-401.

Amiryousefi, M., Ketabi, S. (2011). Mnemonic Instruction: A Way to Boost Vocabulary Learning and Recall. *Journal of Language Teaching and Research*, 2(1), 178-182, doi:10.4304/jltr.2.1.178-182.

Daugaard, H. T., Cain, K., Elbro, C. (2017). Inferences and Vocabulary in Reading Comprehension. From Words to Text: Inference making Mediates the Role of Vocabulary in Children's Reading Comprehension. *Reading and Writing*, 1-28.

Graesser, A. C., Singer, M., Trabasso, T. (1994). Constructing Inferences During Narrative Text Comprehension. *Psychological Review*, 101(3), 371-395. https://doi.org/10.1037/0033-295X.101.3.371.

Innaci, D. L., Sam, D. P. (2017). Using Context Clues as A Vocabulary Learning Strategy: an Experimental Study. *Veda's Journal of English Language and Literature*, 4(3), 39-43. https://www.researchgate.net/publication/319741383.

Joseph, S. R. H., Watanabe, Y., Shiung, Y. J. Cho, B., Robbins, C. (2009). Key Aspects of Computer Assisted Vocabulary Learning: Combined effects of media, sequencing and task type. *Research and Practice in Technology Enhanced Learning,* 4(2), 133-168.

Khalui, S., Langroudi, J. (2016). Vocabulary Learning in Relation with EFL Learners' Self-esteem and Gender. *Modern Journal of Language Teaching Methods*, 6(4), 483-492. https://mjltm.org/browse.php?a_id=245&sid=&slc_lang=fa1.

Kispal, A. (2008). *Effective Teaching of Inference Skills for Reading: Literature Review*. National Foundation for Educational Research.

Layera, R. S. (2020). *Morphological Awareness and Reading Comprehension: The impact of explicit derivational morphology awareness teaching on the Reading Comprehension of higher education EFL students*. Thesis presented for the fulfilment of Master's degree in Applied Linguistics. Technological University of Chile.

Ma, Q. (2014). A Contextualised Study of EFL Learners' Vocabulary Learning Approaches: Framework, Learner Approach and Degree of Success. *Hong Kong: The Journal of Asia TEFL,* 11(3), 33-71. https://www.researchgate.net/publication/272296084.

Mansouri, V. (2015). Vocabulary Instruction: Software Flashcards vs. Word Clouds. *Advances in Language and Literary Studies,* 6(1), 41-45. https://files.eric.ed.gov/fulltext/EJ1128067.pdf.

Mazaji, B., Tabatabaei, O. (2016). Effects of Digital Games on Vocabulary Acquisition of Iranian Low Proficiency Male and Female EFL Learners. *Modern Journal of Language Teaching Methods,* 6(4), 151-163. https://mjltm.org/browse.php?a_id=245&sid=1&slc_lang=fa.

Nematollahi, B., Behjat, F., Kargar, A. (2017). A Meta-Analysis of Vocabulary Learning Strategies of EFL Learners. *English Language Teaching,* 10(5), 1-10. http://doi.org/10.5539/elt.v10n5p1.

Niwa, S. (2019). *The Role of Inference in Second Language Reading Comprehension: Developing Inferencing Skill Through Extensive Reading*. Masters Theses. 792. https://doi.org/10.7275/1444883.

O'Malley, J. M., Chamot, A. U. (1990). *Learning Strategies in Second Language Acquisition*. Cambridge University Press.

Ostovar, N. S. A., Malekpur, A. (2015). Vocabulary Learning Strategies from the Bottom- Up: A Grounded Theory. *The Reading Matrix: An International Online Journal,* 15(2), 235-251. https://www.academia.edu/16308387.

Oxford, R. L. (1990). *Language Learning Strategies: What Every Teacher Should Know*. Heinle & Heinle.

Oxford, R., Crookall, D. (1990). Vocabulary Learning: A Critical Analysis of Techniques. TESL *Canada Journal/Revue TESL du Canada, 7*(2), 9-30. https://www.researchgate.net.

Pretorius, E. J. (2000). *Inference Generation in the Reading of Expository Texts by University Students.* Submitted in accordance with the requirements for the degree of Doctor of Literature and Philosophy in the Subject Linguistics. University of South Africa.

Prichard, C. (2008). Evaluating L2 Readers' Vocabulary Strategies and Dictionary Use. *Reading in a Foreign Language,* 20(2), 216-231. http://nfrlc.hawaii.edu.rfl.

Riska, M., Iskandar, A. S., Nira, E. (2019). The Implementation of Context Clues Strategy in Inferring the Meaning of Unknown Vocabulary to Improve Reading Skill Research in English and Education. *Research English and Education,* 4(2), 80-88.

Sanhueza, P. R. (2011). *Lexical Inferencing Strategies Used by Learners of English as a Foreign Language: Their Relationship to Depth of Vocabulary Knowledge and Inferencing Success*. University of Chile, Faculty of Philosophy and Humanities, Department of Linguistics.

Senoo, Y., Yonemoto, K. (2014). Vocabulary Learning Through Extensive Reading: A Case Study. *The Canadian Journal of Applied Linguistics,* 17(2), 1-22.

Shen, Z. (2013). *The Effects of Vocabulary Knowledge and Dictionary Use on EFL Reading Performance*. https://doi. org/10.5539/elt.v6n6p77.

Susana, I. (2017). Enhancing for Vocabulary Mastery Through Mnemonics Keyword Method to the University Students. *Journal of English Teaching and Research,* 2(1), 2503-4405. https://doi. org/10.29407/jetar.v2i1.725.

Suzuki, K. (2016*).* Nihonjin Shokyū Gaikokugo Gakushūsya no Michigo Suisoku Hōryaku no Kenshō/Lexical Inferencing Strategies Among Japanese EFL Learners at Beginning Level. *Kyōē Daigaku Kenkyūronshū*, 14, 107-117.

Tajik, F. (2018). The Impact of Teaching English Synonym and Antonym Pairs Adjacently and Non-Adjacently on Iranian EFL Learners' Vocabulary Learning and Retention. *Modern Journal of Language Teaching Methods,* 8(3), 200-225.

Yazdi, M., Kafipour, R. (2014). A Qualitative Study of Vocabulary Learning Strategies Applied by Iranian Undergraduate EFL Learners in Real Learning Setting. *English Language Teaching,* 7(7), 1-7. Canadian Centre of Science and Education. http://dx.doi.org/10.5539/elt.v7n7p1.

Yin, Z. (2013). *Infer the Meaning of Unknown Words by Sheer Guess or by Clues? – An Exploration on the Clue Use in Chinese EFL Learner's Lexical Inferencing*. English Language Teaching, 6(11), 1916-4750. https://doi. org/10.5539/elt.v6n11p29.

Yousefi, M. H., Ahadzadeh, M. (2017). Iranian Intermediate EFL Learners' Vocabulary Inferencing Strategies: A Qualitative Study. *Theory and Practice in Language Studies,* 7(7), 533-539.