FREQUENCY EFFECTS IN LEXICAL ACQUISITION: A CONTEXT OF GRAMMAR CLASS

Cüneyt DEMİR
ardgelen@hotmail.com

Siirt University
Department of Foreign Language Education

ABSTRACT

It is almost a century that Palmer (1937) first suggested about the significance of frequency in vocabulary acquisition. Since then on, countless discussions conducted over the issue from the points supporting and falsifying the claim. But what made all these studies similar to one another was the study context. All the studies aimed to reveal the frequency effect had preferred to study in reading classes; furthermore, they had divided the frequency only into two as high and low. However, could frequency not be regarded more than high and low? Then, Nation (2006) introduced a new term 'mid-frequency', which is a term studied few. All told so far was the hub where the present study stemmed from. This study aimed to reveal the possibility of lexical acquisition through frequency effect in a context where the focus is not vocabulary, but grammar. The second associative purpose was to investigate if there is mid-frequency effect or not. The vocabularies of the book that students studied through two terms were analysed, and categorized as high-, mid-, and low-frequency. Then each frequency vocabularies were asked to the participants. As last, which frequency type got the highest correct reply was detected, and each frequency was compared to one another through ANOVA analysis to see if there was any significant difference among high-, mid-, low-frequency vocabularies. The findings showed both parallelism and divisions to the studies in the literature.

Key Words: *Frequency, acquisition, growth, vocabulary, development*

1. Introduction

Vocabulary growth has always been of great importance for second language learners (SLL). Some early studies searched the topic from which the importance stemmed. Nation and Coady (1988) set forth the relation of vocabulary knowledge with reading ability while Laufer and Nation (1995) showed the impact of vocabulary knowledge on writing. Similarly, the importance of vocabulary knowledge on listening and speaking was brought to front in a study conducted in 1996 (Joe, Nation, & Newton).

That the lexical development has an effect on all four skills made the issue a must for researchers to study. As a consequence, many vocabulary teaching methods or techniques developed.

For example, some studies focussed on incidental vocabulary acquiring through reading (e.g. Cho & Krashen, 1994; Day, Omura, & Hiramatsu, 1991; Horst, Cobb, & Meara, 2005) or through listening (Elley, 1989; Penno et al. 2002) while some others stated the importance of intentional vocabulary learning (e.g. Jameel, 2011; Kasahara, 2011) by means of strategies like repetition, word lists, note-taking etc.

As the discussion on whether acquiring or learning is superior the other continues, the importance of word frequency has emerged, which, afterwards, called as frequency effect or repetition effect. According to it, the more a learner repeats a vocabulary or the more a vocabulary occurs in texts or speech, the higher possibility it is for the learner to recognize. In other words, Whaley (1978) explained the same situation as speakers respond more rapidly and accurately to high frequent words than less occurring ones in lexical decision tasks. Concerning 'word frequency' Grainger (1990) defined the term as the words that occur more often are easier to recognize when compared to less frequently occurring words.

Not all researchers agree on the efficiency of frequency, one of the foremost, a study conducted in England claimed that it is not frequency but age of acquisition that presents evidence for word acquisition (Morrison, Ellis, & Quinlan, 1992). Together with proponents and opponents, lexical development research in Second Language (L2) in the scope of frequency appears to be one of the contradicting issues, especially in determining the efficiency of word frequency and repetition in lexical development. Furthermore, it seems that the issue is still at large although the issue is of major importance in that the lexical development has a direct positive correlation with the success of four skills; reading, writing, listening, and speaking. In addition to the contribution of four skills, Ellis (1997) stated the importance of lexical development and high-frequency words for grammar acquisition. All mentioned obligate the issue to study further, and also we need to evaluate how frequency promotes lexical growth.

By keeping the importance of lexical growth of a second language in mind, the present study aims to explore the effect of frequency on vocabulary acquisition. By examining the effect of frequency on lexical acquisition, we can better understand the conceptions and misconceptions that the instructors and researchers hold about frequency, which has been a discussion point for over 2 decades since Nation first published his book on vocabulary acquisition (Nation P. , 1990). With the understanding of the frequency effectiveness on reducing unfamiliar word count, instructors or pedagogical grammar writers can regulate their methodologies in the light of the results of this study.

1.1. High Frequency Word (HFW) and Low Frequency Word (LFW)

That high-frequency words are remembered faster than low-frequency words (e.g. Cattell, 1886), and produced more quickly than low-frequency words (e.g. Oldfield & Wingfield, 1965) has been known for a long time. Because the topic has long been discussed by different researchers, different views have been occurred on frequency, accordingly definitions.

Although there are different definitions of HFW and LFW, HFW can be described as the most appearing vocabularies in language while LFW is the less occurring ones. Bowen (2013) states that HFWs (e.g., come, go, good, look, one) are said and heard more frequently than LFWs, which are non-common words; and in addition to that, HFWs are recognised faster by children when compared to LFWs. Even, there are researchers (e.g. Groot, 2000) claiming the redundancy of teaching HFWs because they assert that high occurring vocabularies in the teaching materials which learners are exposed to will already be acquired.

HFWs constitute a huge part of lexis in a language. Wren (2013) believes that there are 125 words in the English language that make up half of the words we use. A list of these words is provided in Appnx A. As seen from the appendix HFWs usually do not carry meaning on their own; for instance 'and', 'the', 'but' etc. Similarly, the 100 most common words make up about 50 percent of the printed materials while the top 25 make up about a third of the written materials (Fry, Kress, & fountoukidis, 2004).

In contrast to HFWs, LFWs include terminological, uncommon, and special purposes [thematic] words. They are called 'low frequency' because they are not used or repeated frequently, so have a low repetition effect for learners. In short, LFW are words that are not often used. While these words may appear a number of times within one text, readers are not likely to meet them again for a long time (LEAP).

1.2. Acquisition vs. Learning

When Krashen first described his *'Monitor Model'* in the 1970s, *'Acquisition and Learning'* was one of the 5 hypotheses. According to him, there are two independent ways of improving knowledge in a second language; acquisition & learning.

> *Acquisition is a process similar, if not identical to the way children develop ability in their first language. Language acquisition is a subconscious process; language acquirers are not usually aware of the fact that they are acquiring language, but are only aware of the fact that they are using the language for communication. The result of language acquisition, acquired competence, is also subconscious. We are generally not consciously aware of the rules of the languages we have acquired. Instead, we have a "feel" for correctness. Grammatical sentences "sound" right, or "feel" right, and errors feel wrong, even if we do not consciously know what rule was violated . . . In nontechnical terms, acquisition is "picking up" a language.*

> *The second way to develop competence in a second language is by language learning. We will use the term "learning" henceforth to refer to conscious knowledge of a second language, knowing the rules, being aware of them, and being able to talk about them. In nontechnical terms, learning is "knowing about" a language, known to most people as "grammar", or "rules". Some synonyms include formal knowledge of a language or explicit learning.*

> (Krashen, 1982, p. 10)

The present study makes a distinction between learning and acquisition because it is widely believed that learning and acquisition are not the same things. Therefore, acquisition was taken as the focus in this study; accordingly the study was conducted in a way to explore the vocabulary acquisition of participants through the effect of frequency and repetition.

2. Literature Review

Different studies focused on different aspects of frequency. In a study of Tekmen & Daloğlu (2007), an incidental vocabulary acquisition was studied. They have conducted the study not only in relation to learner proficiency level but also word frequency. Their findings showed that coming across a word frequently could facilitate the acquisition of a word. A similar study had been conducted by Rott (1999) but, he had selected the subjects from intermediate language learners. With the aim of detecting the place of frequency in vocabulary acquisition through reading, the results again showed that word exposures between 5 and 15 contributed learners in increasing lexical growth. In her another study, Rott (2007) conducted another study on effect of frequency. This time, she used new terms as F1 and F4 which means exposure to the word one time and four times, respectively. The results indicated that F4 vocabularies were remembered easier than F1 vocabularies.

Another study conducted to find out the effect of frequency between monolinguals and bilinguals (Balota & Chumbley, 2001). The results emphasized the importance of input frequency. What their study pointed out was that bilingual children had a greater difficulty in making up their L2 vocabulary. That study showed that monolinguals take the advantage of word frequency better than bilinguals.

Some other studies studied the importance of parental input frequency in the acquisition of vocabulary. A study which was conducted to detect the effect of frequency in lexical growth through parental input resulted in that frequency undoubtedly has an effect on word acquisition, however, type of words, modality and acquisition time were important factors in acquisition. Their study showed that the frequency has some factors which change its efficiency, so these factors should be taken into account (Goodman, Dale, & Ping, 2008).

Similarly, Stoke (2010) made a study with children to detect the efficiency of frequency. But he did not only use frequency as a impact factor but also Neighbourhood Density, which refers to the number of phonologically similar words in the lexicon, and calculated by determining the number of words that are formed by adding, deleting, or substituting a single sound in a given word (Luce & Pisoni, 1998). His study set forth that low-vocabulary children were higher on neighbourhood density and significantly lower on word frequency when compared to high-vocabulary children. Stoke's study showed us that children who have low-vocabulary knowledge gain more success in vocabulary acquisition than children with high-vocabulary knowledge.

A very recent study titled "A reassessment of frequency and vocabulary size in L2 vocabulary teaching" has gained a different view of point of frequency (Schmitt & Schmitt, 2013). The frequency had been recalled as high and low until that study was conducted. As from the Schmitts' study, the term 'mid-frequency' added near 'high-frequency' and 'low-frequency'. They have highlighted how mid-frequency words (MFW) should be addressed. Their study has indicated the importance of that frequency should not be divided into only two as high and low but mid as well. The newly used term since Nation (2006) has not been falsified or verified by a third study. The present study employed the 'mid-frequency' term and separated the frequency into three; High, Mid, and Low. Precisely, the term 'mid-frequency' was evaluated in this study to see if there was such a kind of frequency effect on lexical acquisition.

On the contrary to the studies mentioned so far, a study was conducted to investigate the recalling levels of high and low frequency words (Hulme, Stuart, Brown, & Morind, 2003). They conducted 3 experiments and used a different word of lists for each experiment. The findings ended up with that high and low-frequency word are recalled equally well when compared to one another.

When the theme is frequency, it will be necessary to mention about Chomsky. The innatists claim that behaviourists or other input-based theories are unable to explain the successful and fast acquisition of language by children despite insufficient input. Then, in his prominent theory, Universal Grammar (UG), Chomsky claims that the input is not crucial in SLA, accordingly the word frequency will not affect the word development. That suggestion contradicts with behaviourism and constructivism which give importance to frequency to able to acquire a second language as well as vocabulary. As related to the findings, the present study can be used to support future frequency studies subsumed under behaviourism or constructivism.

The majority of the studies measured the effect of frequency through reading tasks and stated the importance of frequency in vocabulary acquisition. Of course there were studies indicated that frequency is not overly important in recalling or acquiring vocabulary.

What draw attention is not only the question on exact efficiency of frequency, but also, if there is, the effect of frequency on vocabulary acquisition in grammar classes, where the students' attention is not on words. The present study made a distinction and did not use reading passages or tasks where students focus on vocabulary, but use grammar exercises in which students are interested in acquiring grammar rules not, vocabulary. The students will already focus on vocabulary learning while reading passages. But what about vocabulary acquisition through frequency while they are focussing on grammar structures through in-class-exercises? There are no studies in the literature which focussed on vocabulary acquisition through the effect of frequency when students are focussed on grammar points.

2.1. Research Aim and Questions

The purpose of the present study is two-fold. The first is still a contradicting issue on the effect of frequency in vocabulary acquisition, which has been an issue studied and assessed so far by categorizing the data --vocabularies—into two as high and low. Through the present study, a third categorization effect, mid-frequency, was also studied. The latter research question examined whether frequency affects vocabulary acquisition when the students were focused on grammar exercises but not reading tasks. The previous studies conducted over the issue indicated the frequency effect on lexical growth when students were focussed on reading. So, there is enough knowledge on frequency through reading passages, but it is not known whether the frequency will be effective even if the context where the frequency will be applied is changed from reading class to grammar class. Accordingly, two research questions derived from the aim:

1. Does frequency (high, mid and low) have any salience in acquiring vocabulary?
2. If the context of the study is changed from a reading class to a grammar class, what will be the effect of frequency?

3. Methodology

3.1. Participants

The participants in this present study were 25 adult ESL students. All the participants spoke Turkish as their L1. There were 15 females and 10 males, all of which were over 18 years old. They had been studying prep class in the University of Siirt in Turkey for seven months. Self-reporting of the participants showed that they had not got any English language education before they started the prep class. The participants were those who were not able to pass prep class English proficiency exemption exam at the beginning of the term. To able to test their English background knowledge, the Michigan English Language Assessment Battery (MELAB)[1] test was employed. Although MELAB is composed of 4 parts --(1) composition, (2) listening, (3) grammar, cloze, vocabulary, reading, (4) speaking--, only the third part was implemented to the participants (for the results, see table 1). Five students who were very above and low of the average proficiency level were excluded from the study (participants 2-12-13-20-21), i.e. 25 of 30 were selected as participants.

Table 1: MELAB proficiency test scores of the participants

Participant	MELAB Score	Participant	MELAB Score	Participant	MELAB Score
Participant 1	54	Participant 11	59	Participant 21	66
Participant 2	67	Participant 12	69	Participant 22	50
Participant 3	51	Participant 13	70	Participant 23	53
Participant 4	49	Participant 14	48	Participant 24	58
Participant 5	50	Participant 15	56	Participant 25	57
Participant 6	56	Participant 16	53	Participant 26	54
Participant 7	55	Participant 17	50	Participant 27	50
Participant 8	50	Participant 18	50	Participant 28	51
Participant 9	52	Participant 19	51	Participant 29	50
Participant10	59	Participant 20	32	Participant 30	55

3.2. Data / Materials

The date came from the book titled "*English Grammar in Use*" (Murphy, 1994) . The book is 306 pages, and the second edition. It is for intermediate students and contains 136 units, 7308 words and 137848 tokens. All the participants finished the book at the end of the term, which lasted for 7 months.

3.3. Instruments

1. To able to measure and count the frequency of the vocabulary of the book "*English Grammar in Use*", a concordance program was employed.

2. To able to convert the pages of the book to .txt files, a software program named 'Free OCR' was used.

3. To able to see general descriptive statistics of the data, SPSS 20 software was used.

4. To able to see whether there is any statistically significant difference across high-, mid-, and low frequency vocabularies, ANOVA analysis was employed.

3.4. Procedure

The participants of the present study had been taught on grammar throughout 7 months. At the process of the education, they used the book "English Grammar in Use", and they focused on grammatical structures of the exercises and instructions on grammar. Towards to the end of the term, to able to see whether the frequency has an effect on vocabulary acquisition, even if the focus is not on vocabulary because the grammar coursers pay their attention to grammatical points, 25 highest-frequency vocabularies, 25 mid- frequency vocabularies, and 25 lowest frequency vocabularies were determined through the concordance program (instrument 1). Mostly, the concordance software programmes use only .txt files to able to analysis. So, each page of the original book was scanned through a special program (instrument 2), and the pages converted into .txt files. The high-, low- and mid- frequency vocabularies are shown in table 2.

Table 2: The categorization of the vocabularies according to their frequency.

High-frequency			Mid-frequency			Low-frequency		
Nr	**Word**	**Frequency**	**Nr**	**Word**	**Frequency**	**Nr**	**Word**	**Frequency**
1	Wish	127	**1**	Personal	6	**1**	Sweep	1
2	Right	125	**2**	Piece	6	**2**	Sympathy	1
3	Take	124	**3**	Rice	7	**3**	Tail	1
4	Yet	118	**4**	Shirt	8	**4**	Swing	1
5	Possible	107	**5**	Quick	10	**5**	Swear	1
6	Leave	98	**6**	Secret	10	**6**	suspect	1
7	Decide	92	**7**	Locked	12	**7**	Rode	1
8	Buy	91	**8**	Salary	12	**8**	Retire	1
9	Afraid	75	**9**	Interview	15	**9**	Repaint	2

10	Hungry	74	10	Sell	16	10	Deal	2
11	Feel	73	11	Point	20	11	Predict	2
12	Alone	67	12	Mistake	20	12	Neat	2
13	Ill	66	13	Fall	21	13	Manuscript	2
14	Road	66	14	Matter	21	14	Liberty	2
15	Enjoy	64	15	Once	22	15	Plate	3
16	Perhaps	59	16	Show	21	16	Queen	3
17	Shop	58	17	Similar	22	17	Recent	3
18	Thing	55	18	Wedding	22	18	Spoiled	4
19	Mean	51	19	Begin	23	19	Sore	4
20	Country	47	20	Changed	23	20	Sofa	4
21	Whole	45	21	Forward	24	21	Sink	4
22	Visit	41	22	Lend	24	22	Split	4
23	Fell	39	23	Manager	24	23	Term	5
24	Meal	37	24	Order	25	24	Recognize	5
25	Believe	36	25	Paper	25	25	Patience	5

Whether a vocabulary is high, mid or low was categorized in respect to their repetition. As seen from the table 2, the frequency between 1 and 5 was regarded as low frequency, while between 5 and 30 as mid frequency; and from 25 to 130 as high frequency. According to the concordance results, the frequency over 130 existed; however they were not provided in the table and were not used as data in the present study because they were overly general words *(e.g. we, use, g*o), conjunctions *(e.g. because, that, so)* or grammatical units *(e.g. am, is, are, have)*. Having completed the analysis of the words as high-, mid-, and low- frequency, the words stated in table 2, 75 vocabularies in total, were given to the participants and required to write Turkish equivalents (see appnx. B).

3.5. Data analysis / Assessment

Having collected the pages from the participants, these pages were evaluated one by one. The correct and incorrect equivalents of the English vocabularies were calculated and each participant's number of correct equivalents were recorded as high, mid, and low frequency words.   Together with the writer of the present study, a second writer examined the data. Then the data was installed to SPSS program in order to see the general descriptive statistics (Instrument 3). As last, the total correct answers of the participants were calculated through ANOVA analysis (Instrument 4), and the overall significance level of each frequency was detected.

3.6. Interrater reliability

The researcher and his colleague served as two raters to evaluate the data collected from the participants. The second rater has an MA degree on English language, and has been an instructor on duty in a university for 4 years. The second rater was informed about the study aim and asked for examining the data through the instructions given by the writer of the present study. To maintain consistency in scoring and to minimize any bias a rater could develop, each rater independently examined the data.

Inter-rater agreement measured through Cohen's kappa in terms of how the data were evaluated; and the result was 1.00, which equals to perfect agreement. So, it can be said that there existed a consensus or homogeneity between raters in terms of evaluation.

4. Results & Discussions

High-frequency Words
The findings for the high-frequency words showed that, in total, 611 correct answers of 625 answers were given (see appnx. C for each participant's answer). That means that there were only 14 incorrect Turkish equivalents given by the participants as regards HFWs. Almost all participants gave correct answers for all HFWs except participants 1, 2, 4, 5, 11, 12, 15, 20, and 22 with one incorrect, participant 17 with 2 incorrect answers, and as last participant 10 with 3 incorrect answers. The table 3 shows the general statistics of the answers.

Table 3: General statistics of the answers of the participants concerning HFWs.

High-frequency Words				
Nr	**Word**	**Correct**	**Incorrect**	**Total**
1	Wish	24	1	25
2	Right	25	0	25
3	Take	25	0	25
4	Yet	23	2	25
5	Possible	25	0	25
6	Leave	24	1	25
7	Decide	25	0	25
8	Buy	25	0	25
9	Afraid	25	0	25
10	Hungry	25	0	25
11	Feel	25	0	25
12	Alone	24	1	25
13	ill	25	0	25
14	Road	25	0	25
15	Enjoy	25	0	25
16	Perhaps	25	0	25
17	Shop	25	0	25
18	Thing	25	0	25
19	Mean	24	1	25
20	Country	25	0	25
21	Whole	22	3	25
22	Visit	25	0	25
23	Fell	22	3	25
24	Meal	23	2	25
25	Believe	25	0	25
TOTAL		**611**	**14**	**625**

Mid-frequency Words

The results for the mid-frequency words showed that there were, in total, 596 correct answers of 625 answers (see appnx. D for each participant's answer). The findings mean that there were 29 incorrect Turkish equivalents answered by the participants as regards mid-frequency words. The participants who gave full correct Turkish equivalents of mid-frequency words were 2, 3, 4, 5, 6, 12, 13, and 22. More, there were 8 participants who gave one incorrect answer while all others had more than one incorrect answer. The table 4 shows the general statistics of the answers.

Table 4: General statistics of the participants' answers concerning mid-frequency words.

	Mid-frequency Words			
Nr	**Word**	**Correct**	**Incorrect**	**Total**
1	Personal	25	0	25
2	Piece	21	4	25
3	Rice	24	1	25
4	Shirt	25	0	25
5	Quick	24	1	25
6	Secret	25	0	25
7	Locked	25	0	25
8	Salary	23	2	25
9	Interview	22	3	25
10	Sell	25	0	25
11	Point	23	2	25
12	Mistake	25	0	25
13	Fall	24	1	25
14	Matter	21	4	25
15	Once	24	1	25
16	Show	25	0	25
17	Similar	25	0	25
18	Wedding	23	2	25
19	Begin	23	2	25
20	Changed	24	1	25
21	Forward	25	0	25
22	Lend	23	2	25
23	Manager	25	0	25
24	Order	22	3	25
25	Paper	25	0	25
TOTAL		**596**	**29**	**625**

Low-frequency Words

The results for the low-frequency words indicated that there were 504 correct answers of 625 answers in total (see appnx. E for each participant's answer). It means that there were 104 incorrect Turkish equivalents answered by the participants as regards low-frequency words.

The appendix 5 showed that the participants who gave full correct Turkish equivalents of low-frequency words were not existed, which means all the participants had at least one incorrect answer. As regards words, only "piece, show, and similar" were answered correctly by all participants. All other words were answered incorrect by at least one participant. The table 5 shows the general statistics of the answers.

Table 5: General statistics of the answers of the participants concerning LFWs.

		Low-frequency Words		
Nr	**Word**	**Correct**	**Incorrect**	**Total**
1	Sweep	18	7	25
2	Sympathy	25	0	25
3	Tail	22	3	25
4	Swing	18	7	25
5	Swear	23	2	25
6	Suspect	20	5	25
7	Rode	23	2	25
8	Retire	22	3	25
9	Repaint	24	1	25
10	Deal	17	8	25
11	Predict	21	4	25
12	Neat	17	8	25
13	Manuscript	16	9	25
14	Liberty	20	5	25
15	Plate	19	6	25
16	Queen	25	0	25
17	Recent	25	0	25
18	Spoiled	16	9	25
19	Sore	17	8	25
20	Sofa	22	3	25
21	Sink	19	6	25
22	Split	16	9	25
23	Term	24	1	25
24	Recognize	19	6	25
25	Patience	16	9	25
TOTAL		**504**	**121**	**625**

ANOVA Results

A one-way ANOVA was conducted to compare the number of correct answers of students as related to HFWs, MFWs and LFWs in order to find out whether frequency has an effect on vocabulary retention. The findings indicated that there is a statistically significant difference ($F(2, 48)=81.065$, $p<.001$) across three kinds of frequency; high, mid, and low. To detect where the significant difference occurred, pairwise comparisons with Bonferroni adjustment were calculated.

As seen from table 6, the results showed that while there is a statistically significant difference between mid-frequency (*M*=23.84, *SD*=1.313) and low-frequency (*M*=20.16, *SD*=1.573), and between high-frequency (*M*=24.44, *SD*=.768) and low-frequency (*M*=20.16, *SD*=1.573), there is not a significant difference between high-frequency (*M*=24.44, *SD*=.768) and mid-frequency (*M*=23.84, *SD*=1.313).

Table 6: Paired differences of HFWs, MFWs and LFWs

	N	*Mean*	*SD*	*p value*
Pair 1 HFW - MFW	*25*	.600	.768	.083
Pair 2 LFW - MFW	25	- 3.68	1.313	.000
Pair 3 LFW - HFW	**25**	**- 4.28**	**1.573**	**.000**

Concerning HFWs it can be claimed that repetition has an effect on vocabulary acquisition as Laufer stated in her study. According to Laufer (1997), memorization is affected by higher word frequency positively because the learner come across more exposures to the vocabulary. The results of the present study carry similarities to another study which was conducted long before Laufer, but this time it had not been talked about memorization but used a different term "lexical access" (Segui, Mehler, Frauenfelder, & Morton, 1982). The results stated the advantage of word exposure frequency for lexical access as in this study.

On the other hand, the findings of the present study concerning the effect of HFWs contrast with Morrison et al (1992). That may be because in the present study the age factor was not taken into consideration. Marrison et al. had kept the age factor in mind while they were carrying out their research.

Another study as regards HFWs and LFWs, Hulma et al. stated that both HFWs and LWFs are remembered equally well. That they find the insignificance between HFWs and LFWs recalling may be affected from former word repetition stages. It is sometimes possible to call a word low frequency when only a source was employed because it is possible for a word to be low frequent in a source while high-frequent in another.

As regards the newly term '*mid-frequency*', the present study indicated a non-significant value in terms of vocabulary acquisition when compared to HFWs. The findings suggested that HFWs and MFWs have similar effect on vocabulary acquisition. That is to say, although high frequency is of importance for lexical growth, mid-frequency will also have a quasi impact. On contrary to the findings of the present study, Schmitts (2013) insisted that the vocabularies should not be only divided into two as high and low, but should be a trisection through the adding of mid-frequency. However, conversely, the present study did not find a significant difference between high-frequency and mid-frequency in terms of lexical access. In other words, aforementioned, that a researcher makes a distinction between HFWs and MFWs may not be meaningful if the issue is vocabulary acquisition through frequency effect.

5. Conclusion

Word frequency is known to have various effects (Brysbaert, Buchmeier, Conrad, Jacobs, Bölte, & Böhl, 2011) on different parts of language, and lexical acquisition is one of them. Throughout the study, it is understood that frequency, which is a kind of repetition, affected vocabulary acquisition. Therefore, on contrary to those who claim unimportance of frequency in lexical growth, the present study empirically showed that the frequency is important and should not be overlooked by the instructors in the field. Furthermore, as from the present study until it is empirically falsified, it may be suggested that the researchers or instructors on vocabulary training are not necessarily to care about mid-frequency as it has the same effect with high-frequency.

The literature provides evidences that the studies conducted over frequency preferred the study context as reading classes. The present study alienated itself from the studies in the literature and carried out the implications in a grammar class, which showed alike results with reading classes. So, it can be stated that frequency is important, and has an effect on vocabulary retention regardless of the context it was measured. Put it differently, the effect of frequency will exist whether you use it in grammar classes or reading classes.

The effect of frequency was verified in the present study. Although frequency seems a general topic to study by researchers, acquiring vocabulary through frequency is an incidental learning, and therefore, may be related to cognitive-linguistics. So, the results may be different or more interesting if the issue is conducted from that aspect. That is to mean, the issue is advisable for cognitive linguistics to study, which may provide more detailed results and explanations on frequency effect.

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