

## ASSOCIATION OF HIGH FREQUENCY AND LOW FREQUENCY WORDS WITH READING COMPREHENSION OF ESL UNDERGRADUATE'S

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### Abstract:

Knowing about the language is very aspiring goal. Though, all the vocabulary of language is not acknowledged even by the native presenters. There are several words families that existing in English language. The words in families are allocated according to their frequencies; high frequency words comprise 80% of running words in the text, while low frequency words almost cover 5% in the academic text. The core purpose of this study is to determine the association of high and low frequency words with reading by using (Nation, I.S.P. & Beglar, D, 2007) different levels of test with different TOEFL reading subset, the investigation based on the performance of second language learners. The setting of this study was based on experimental research. The nature of this study is quantitative. The research queries were responded through descriptive statistical analysis. This study took 30 participants for data. The data deals with two type of tests, first one was (Nation, I.S.P. & Beglar, D, 2007) vocabulary level test for inquiring the extent of high and low frequency words, while TOEFL two paragraphs for reading test. For the analysis of data, regression and person's correlation statistics were examined. The finding of this research study proves positive and significant result. The obtained result presented that (Nation, I.S.P. & Beglar, D, 2007) different level of vocabulary test that was; high frequency words have solid and positive association with TOEFL reading subsets while low frequency words have insignificant impact on reading performance of second language learners.

**Key-words:** high frequency words, low frequency words, Vocabulary size, Reading comprehension.

## INTRODUCTION

“Vocabulary plays very essential role in reading comprehension “cooper (1984,1989). Few researchers assert that a reader whose “vocabulary is inadequate to cover 95% of the words in a passage will not be assurance comprehension”. “A reader themselves conceive vocabulary to be the most important obstacle in second language reading comprehension”. Many researchers have recommended that “L2 readers must understand 95% of the words in any text to ensure reasonable reading comprehension of the text” (Laufer & Maher salah, 1989,2008), while some researchers recommended that “L2 readers need 98%-word coverage to read un-simplified text for delight” (Maher salah & Nation, 2008,2001). Many recent research studies avowed the

conspicuous part of the size of vocabulary knowledge in the comprehension of reading. More than two periods, investigators have institute that “breadth test of vocabulary knowledge can very well predict success in reading, writing, general proficiency, and academic achievement” (Laufer & Goldstein, 2004; Nation & Meara, 2002). Similarly, Nations tests in order to investigate the vocabulary levels of leaner, it was very easy to used and also very helpful and credible (Qian, Read, & Nation, 2000,2001;Schmitt & Clapham & Koda, 2001,2005) and thus it has been extensively utilized by many investigators in order to figuring EFL/ESL learners’ vocabulary size (Zahar, Webb, & Qian,2005,2008). Hence, the focus of recent investigators on recent work is to investigate that how much knowledge about the words a learner can possesses. (Laufer, 2003). In order to execute this aim, size of vocabulary tests have been designed. So that it cleared the prominent place of vocabulary in target language, learners require a particular rate of vocabulary knowledge in order to achieve their goals (Alderson & Banerjee, 2001;2007).

### **Objectives of the study**

To examine the association of high frequency words and low frequency words with reading comprehension. To examine the impact of different levels of vocabulary test on reading comprehension. To examine the impact of Nation, I.S.P. & Beglar, D (2007) vocabulary levels test on TOESL reading subsets.

### **Research question**

Research questions based on above objectives, which are: what is the association among high, low frequency words with reading comprehension? What is the impact of Nation, I.S.P. & Beglar, D (2007) vocabulary levels test on TOESL reading subsets?

### **Hypothesis of the study**

H1: There will be a powerful impact of high frequency and low frequency words on reading comprehension.

H0: There will be no powerful impact of high frequency and low frequency words on reading.

### **Theoretical Concept of the Study**

The interactive model was examined in the perspective of reading, because the reading and text features are usually incorporated by this model. It contains all factures like prior knowledge, strategies of reading, proficiency of language, reading process belief and motivation (Aebersold, J., & Field, M.L., 1997).

So, the interactive models of reading termed by Grebe (1988) as: In its unassuming arrangements, this model is assimilated with both of the models that are top down and bottom up. This interactive model assimilated in themselves with the implications “of reading is an interactive process”. On the other hand, at the same time it also assimilated with the notion of

quick and exact factors of recognition for the words and the letters, it also blow-out the activation of lexical form and the automaticity in these forms Stanovich (1980).

### Literature review

Yu (1996 as cited in Chen 2011), investigate the “chines and Japanese university students” with the use of English motion verbs, used of “vocabulary level test” to examine the early vocabulary breadth of applicants. Yu recounted a very strong association among vocabulary level test and the “TOEFL/ Michigan test item”, therefore was authorizing the concomitant strength of this “VLT” for this research. Moreover, examine the impact of vocabulary on second language reading. (Qian D. D., 1999) Also found high association between VLT score and marks of the subcategories of IELTS’ in reading.

Around the 2006, VLT was used by huang as consistent instruments to measure vocabulary size of ESL Chinese students. 24 university students were participated in this study; they were studying in moreover “McGill University or Concordia, the two English speaking universities Montreal, Quebec, Canada”. The finding displays a huge reliability of vocabulary level test in this work too.

Likewise, another study, that was conducted by (Mokhtar, (2010).). In this study investigator directed vocabulary level test between the students of three sixty “Malaysians diploma students at university technology MARA”. In this study investigator key concern was that to investigate participant’s high frequency words weather students were good in a sufficient high frequency words or not, while the investigator attention was with participant’s entire score on the test. So, investigation in this perspective, the current investigators estimated it vital to launch a study in which reading performance courses is waged more attention to vocabulary.

An amount of researcher studies, (e.g. (Koda, 1989), (Laufer B, 1992a), (Qian D., 1999.) have been utilized marks of vocabulary mass to anticipate level of educational reading performances. (Laufer B, 1996.) In her research bring out distinctive type of association between ‘reading comprehension tests and vocabulary level tests’. In one research was with 92 participants studied in first year of university, their native language was Hebrew or Arabic (Laufer, 1992a), found association between the average on the VLT (Nation, 1983) and average on reading comprehension that was .50. And average the average among Euro centers vocabulary test (Jones, 1989)) and average on reading performance was 0.75. In one more research, took 90 first year university participant of previous L1 background (Laufer, 1996), an association .71 was described among the student’s mark on those VLT and reading comprehension test.

## Iranian studies on vocabulary knowledge

There were some studies that conducted by Iran researchers. (Kaivanpanah, S., & Zandi, H, 2009) The studies were investigated on 57 EFL learners with 40 females and 17 males. This research makes an effort to examine the part of depth of vocabulary information on reading comprehension. This study utilized TOEFL test to conduct this research. The finding of the study revealed that there was a substantial relation among reading and vocabulary knowledge. (Anjomshoa,L. & Zamanian, M, 2014) This research were attempted to investigate the “vocabulary information effects on reading comprehension”.

The data for this study were taken from EFL “Iranian learners” who were the students of English, they were 81 in numbers. Tool that is used in this study was questioner. The finding of this research presented positive outcome among vocabulary information and reading comprehension. Golkar, M., & Yamini, M (2007) Was directed to examine the consistency and rationality among the levels of vocabulary tests, the core aim of this research is to investigate the scope of vocabulary knowledge of Iranian EFL learners and the impact of different frequencies level test. It also investigates the association among vocabulary and reading comprehension and the proficiency of learners on reading. The study utilized three level tests and TOEFL test for reading comprehension. The undergraduate learners of engineering and English language and literature were taken for this study, they were 76 in numbers. Finding of the research demonstrated the consistency and rationality of VLT.

## Research Methodology

### Research Design

As this study was based on experiment, so this research study adopts quantitative research design. Therefore, open ended questionnaire was used in order to achieve results. It’s a descriptive study of Shaheed Benazir Bhutto University, SBA and its specifically based on the student enrolled on English department.

### Research Tools

This research is purely quantitative in nature. Two tools were used in this research in order to get answers of research queries. The first tool is “Paul nation’s vocabulary level test” new version i.e. 14000 level tests by (Nation, I.S.P. & Beglar, D, 2007). This test contains 140 multiple choice items, with 10 items from each word family level. The study deals only four levels, the 2000 and 3000 level for high frequency words test while 5000 level tests contain mid frequencies words and the 10,000 for low frequency words test. TOEFL was chosen to investigate the association among the high and low frequency words and reading comprehension. These two passages are the collection of distinctive topics based on five multiple questions; these both tests taken by the same participant.

**Research Participant**

The population of this research contained ESL student of undergraduate, they were registered in the English department of SBBU.SBA. The applicants were thirty in number and taken randomly.

**Research variables**

This research study deals with both type variables; reading comprehension as dependent variable and vocab mass as an independent variable.

**Data Analysis**

The statistical package for social sciences (SPSS) was utilized in order to analyze the data. Two-tailed Pearson product-movement correlations were ran. For statistical analyses of the data linear regression techniques was used, as the data is not much large so that it was analyzed though linear regression. Two-tailed Pearson product-movement correlations were practiced in order to identify the score of reading comprehension (RC), vocabulary level tests (VLT).

**Descriptive Data of vocab and reading comprehension**

This section described the performance of participant and defined the means of both dependent and independent variables.

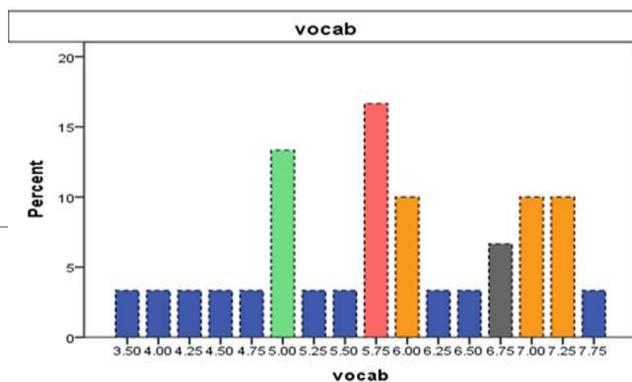
	N	Minimu m	Maximu m	Mean	Std. Deviation
<b>vocab</b>	30	3.50	7.75	5.8417	1.07776
<b>Reading Score</b>	30	3.00	8.00	5.4333	1.38174
<b>Valid N (list wise)</b>	30				

**Table 1: Descriptive Statistics of vocab and reading comprehension**

As the table 1 displays the mean of both instruments, the mean of vocabulary was 1.07776 and the mean of independent variable i.e. reading score was 1.38174, respectively.

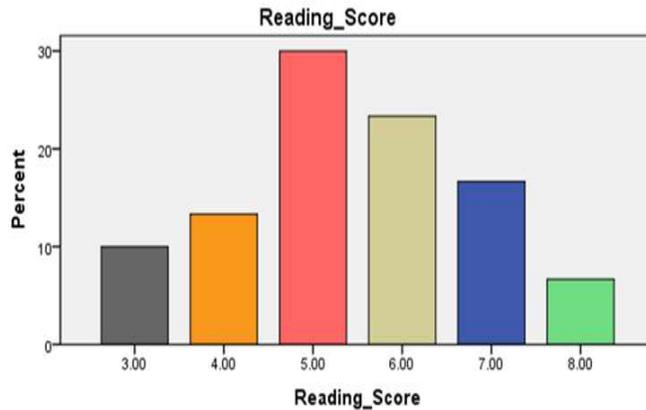
**Graphical representation**

The Bar graph the study knowledge of



shows that participants of retained 30% to 77% vocabulary words.

The Bar graph shows 30% to 80% understanding of ESL participants on reading comprehension.



**Determination of reading understanding performance by each level test distinctly.**

As the sample size of the study is not very huge and entire population was not used as a sample for this study, so that the adjusted R square has been used for analysis.

**Table 2:**  
Adjusted R square value: 0.697

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.859 <sup>a</sup>	.739	.697	.76094
a. Predictors: (Constant), Ten Thousand Level, Three Thousand Level, Two Thousand Level, Five Thousand Level				

The value of adjusted R square is 0.697, which displays that independent variables that is 2000, 3000, 5000, and 10000 have 69.7% effect on dependent variables.

### Regression coefficient of four level tests distinctly

Regression coefficient of four level tests separately and its significant values Inference and Results Drawn here.

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.318	.854		-1.543	.135
	Two Thousand Level	.387	.090	.470	4.300	.000
	Three Thousand Level	.269	.105	.296	2.558	.017
	Five Thousand Level	.238	.095	.290	2.491	.020
	Ten Thousand Level	.194	.100	.216	1.936	.064

a. Dependent Variable: Reading Score

**Table 3: Regression coefficient of four level tests separately**

The regression coefficient ( $\beta$ ) is 0.387 for two thousand level and the significant value of two thousand level is 0.000, which demonstrate that two thousand level tests is displaying significant influence on Reading Comprehension. That means if independent variable two thousand level tests will change by 1 the dependent variable Reading Comprehension will be enlarged by 0.387. Table signifies that  $t = 4.300$  and level of significance is 0.000 which is less than 0.05, which shows that model is significantly good fit.

Regression coefficient ( $\beta$ ) is 0.269 for three thousand level test and the significant value of three thousand is 0.017, which shows that three thousand level tests is showing its important effect on Reading Comprehension. Means if independent variable of three thousand level tests

is improved by 1 then the dependent variable Reading Comprehension will be enlarged by 0.269. Table signifies that  $t= 2.558$  and level of significance is 0.017 which is less than 0.05, which shows that model is significantly good fit.

Regression coefficient (  $\beta$  ) is 0.238 for five thousand level test and its significant value is 0.020, which shows that five thousand level tests is screening significant impact on Reading Comprehension. Means if independent variable five thousand level tests are changed by 1 the dependent variable Reading Comprehension is increased by 0.238. Table signifies that  $t= 2.491$  and level of significance is 0.020 which is less than 0.05, which shows that model is significantly good fit.

Regression coefficient (  $\beta$  ) is 0.194 for ten thousand level test and the significant value of ten thousand is 0.064, this shows that ten thousand level tests is showing insignificant impact on Reading Comprehension. That means if independent variable ten thousand level tests are changed by 1 at that point the dependent variable Reading Comprehension is increased by 0.194. Table signifies that  $t= 1.936$  and level of significance is 0.064 which is more than 0.05, which shows that model is not significantly good fit.

## Discussion

The achieved results indicate positive, significant association among three-word levels that were 2000, 3000 and 5000 with reading comprehension, whereas 10000 level results were indicate insignificant connection in between 1000-word level and the comprehension of reading. The attained result of two thousand (2000) word level test indicate positive and strong relation with the significant  $0.00 < 0.05$ . The 2000 level test keep high frequency words so, result showed that high frequency words play vital role on the ESL Learners reading understanding. Furthermore, the finding results of three thousand (3000) word level test presented that there were a solid and positive relation with reading

performance with significant value of  $.017 < 0.05$ . Moreover, the third level test that is five thousand (5000) word level test, it contains mid frequencies words, that comes in between high and low frequencies words, the achieved result of this level was also positive and represent strong relation with reading at the significant value of  $0.02 < 0.05$ . Particularly, determination of result displayed that mid frequency words also have adequate or significant influence on ESL learners reading performance. Whereas, the attained result of fourth level test that was 10000-word level presented negative and insignificant impact at the value  $0.64 > 0.05$ . Moreover, the findings indicate that the correlation among ten thousand (10,000) word level and reading comprehension was not strong enough. This ten-thousand-word level test contains low frequency words. So, the 2000, 3000, and 5000 words levels have strong impact on performance of ESL learners reading, while 10000-word level tests not have much impact on ESL learner's reading comprehension. The results conquered from of this portion of data analysis give maintenance to

some research studies carried out by (Tannenbaum, K.R., Torgesen, J.K., & Wagner, R.K., 2006), (Qian, D., 2002) and (Laufer, B., & Paribakht, T.S., 1998).

### Conclusion

The obtained result presented that 2000, 3000 and 5000 word level of test are interrelated with each other, their interrelation in a sense that the subject who score 80% in two thousand word level test (2000) in three thousand word level test (3000) its score was 70 to 75%, while in five thousand word level test (5000) its score was 60 to 70%. As high frequency words deal almost 80% with academic text where as low frequency words deal 5% with academic text. So, the result indicates that the one that have more knowledge of high frequency words also possess more knowledge of middle frequency words, as for as low frequency words are concern it shows insignificant value in the determination of results. While high and mid frequency words all shows significant relation with reading comprehension, whereas, low frequency words have insignificant relation with reading comprehension.

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