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INVESTIGATION OF THE RELATIONSHIP OF VOCABULARY SIZE AND VOCABULARY DEPTH: A STUDY OF IELTS TEST TAKERS OF MAJOR AND MINOR CITIES IN PUNJAB PAKISTAN

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Abstract

This research aims to explore the correlation among the test takers of IELTS in vocabulary size and vocabulary depth. Previous research has looked into this topic at the university level in the settings of ESL and EFL but not in the context of IELTS learners. This research paper examines the difference between receptive vocabulary size and vocabulary depth of IELTS undergraduate test takers of major or minor cities in Punjab, Pakistan. This research focused on two assessments of language: The Vocabulary Size Test and the Word Association Test. The researcher applied the VST for the evaluation of the vocabulary size and WAT for the evaluation of the vocabulary depth. This study is based on correlational research. The data was collected through convenient sampling from one hundred seventy test takers in Punjab. The correlation was analyzed through SPSS. The independent sample t-test was applied for the analysis of the difference between major and minor cities' scores on the VST and WAT. The finding shows that there is no difference among the test takers of IELTS on the scores of VST in major or minor cities of Punjab, Pakistan. The comparison of the group reveals that there was a minor difference among the scores of major or minor cities on the WAT. The findings show that there was a strong correlation between vocabulary size as well as vocabulary depth. The results of the current study cannot be generalized to the entire population due to several limitations. Because just a tiny section of the population participated in this study, future research may use a larger sample size and population to generalize the findings.

Keywords: Correlation, IELTS, Simple Linear regression, Vocabulary, Vocabulary size, Vocabulary depth

Introduction

Meara & Jones (1988) explored that vocabulary knowledge is most important for learning abilities. It is impossible to overstate the value of vocabulary in language acquisition and instruction. Perhaps the most crucial component of enhancing English competence is expanding the range of words available. If students are unfamiliar with the vocabulary used during the process of learning, it will prove difficult for them to comprehend the information that the instructor provides. The two aspects of vocabulary knowledge, VS (Vocabulary Size) & and VD (Vocabulary Depth)—have been distinguished by several scholars in the fields of teaching and learning (Bogaards & Laufer, 2004; Haastrup & Henriksen, 2000; Read, 2000). Read (2000) writes that "Vocabulary size estimates a student's vocabulary size using a graded sample of words covering numerous frequency levels" (p. 126). The quantity of words an individual knows at a certain level is known as vocabulary size. Many researchers employed various methods to gauge vocabulary proficiency (Wesche & Paribakht, 1996). With the use of a vocabulary size test (VST), we can quickly understand a significant amount of data (Nation, 2001). The impact of Meara's vocabulary size exam depends on variables including second language proficiency and mother tongue for those learning a language (Read, 2000).

Problem Statement

Various studies investigated the relationship between vocabulary size and vocabulary depth among EFL students. Qian (1999) investigated the correlation between depth or size and reading comprehension. In addition, Qian (2002) looked at the role of vocabulary breadth and some vocabulary depth characteristics in reading comprehension. In contrast to previous research, the current study examines the contributions of two dimensions of vocabulary knowledge, VS and VD, of IELTS test takers in Pakistan. Previous research (Akbarian, 2010; Kuleli, 2015; Hadipour, 2016; Rehman & Iqbal, 2019) has looked into this topic at the university level in the settings of ESL and EFL but not in the context of IELTS learners. The researcher aims to investigate the correlation between the vocabulary size (breadth) and the vocabulary depth of undergraduate IELTS test takers in Pakistan.

Significance of the research

The current study presents some pedagogical consequences for the teaching profession by shedding light on the English vocabulary knowledge of Pakistani IELTS test takers. Such a study will give objective evaluations of the various programs in Pakistan. Quantitative vocabulary investigations are also required to assess the vocabulary knowledge of graduates of English programs. Such research will assist learners, program designers, or teachers at the university level in providing their students with skills to succeed in their career prospects as English teachers, translators, or whatever other occupation they choose.

Research Questions

Q 1. There is any difference among the test takers of IELTS on the marks of VST in major and minor cities of Punjab, Pakistan

Q 2. There is any difference among the test takers of IELTS on the marks of WAT in major and minor cities of Punjab, Pakistan

Q 3. There is any correlation among the test takers of IELTS on the marks of VST and WAT

Research Hypothesis

Ho1. There is no difference among the test takers of IELTS on the marks of VST in major and minor cities of Punjab, Pakistan.

Ho2. There is no difference among test takers of IELTS on the marks of WAT in major and minor cities of Punjab, Pakistan.

Ho3. There is no correlation between IELTS test takers on the scores of VST and WAT.

Literature Review

In the past few years, vocabulary knowledge has received far greater attention. Vocabulary knowledge might be a good sign of L2 proficiency. Throughout our everyday

conversations, vocabulary is important for writing, speaking, listening, and reading. Vocabulary knowledge (VK) is none merely quoting a word. Due to their vocabulary expertise, readers must use the phrase that best matches the context in which it is employed. Vocabulary Knowledge (VK) is crucial for this area since readers must have a formative knowledge of a word's meaning.

One may argue that VK is an organized manner in which numerous knowledge types are presented to the point where all knowledge components for a specific thing are known. Additionally, it seems that some knowledge is acquired more quickly than others.

Vocabulary size (VS)

A person's entire number of words they are familiar with and can use is referred to as their vocabulary size. It represents the range and depth of words in a person's language repertoire. A larger vocabulary size typically indicates a greater command of the language and the ability to comprehend and express oneself more effectively. This is important to note that vocabulary size can vary significantly among individuals.

One of the two techniques can be used to estimate the vocabulary's size. Dictionary selection is used in the first technique, while an entire corpus or an extracted frequency list taken from a corpus is used in the second way. Finding a dictionary that is extensive enough to contain all of the words that learners might be somewhat familiar with is necessary for the dictionary-based method (Nation, 2001). The test subjects are assessed using a random selection of dictionary words. The sample consisted of one word within every hundred words contained in the dictionary.

The second method creates a list of words that are often used based on corpus data. The list could be either the Academic Word List by Coxhead (2000) or the Global Service List (GSL) created by West (1953). The dictionary-based method and the frequency list method both operate on the same principles. The two most often-used lists of English words are the GSL and the AWL. The GSL has approximately families of words. The first 1,000 often-used words and the second 1,000 regularly-used words make up the GSL's two portions (Milton, 2009). The frequency or diversity of university categories, including those in the arts, sciences, business, and law, was employed to establish the AWL.

Using a graded sample of terms with different frequency levels, Read (2000) investigates how vocabulary size assesses a student's vocabulary (p. 126). The quantity of words someone is familiar with is referred to as their vocabulary size. The aim of vocabulary size in the context of second language learners is to gauge how many common terms they are familiar with about their level of understanding (Nation, 2000).

Vocabulary Depth (VD)

According to Warning and Nation (2004), a learner's entire knowledge of words can be shown in all facets of their vocabulary knowledge. The student's knowledge of a word's frequency, morphology, meaning, pronunciation, and spelling, as well as syntactic characteristics, is referred to as their vocabulary depth. Understanding all of a word's nuances falls under the category of vocabulary depth. Read (2004) offers three separate pathways of development (pg 146-161)

1. ***Precise meaning:*** The correlation between a fundamental understanding of the meaning of the words and a detailed or precise understanding of the words meaning.
2. ***Comprehensive knowledge of words***. Comprehensive knowledge of words is the awareness of the word that maintains its orthographic, morphological, anatomical, structural, collocational, and contextual qualities and its word meanings.
3. ***Network of Knowledge:*** The capacity to incorporate the word into a cognitive lexical network, relate it to other

words, and distinguish it from important keywords.

The Word Associates Format (Read 1993, 1998) The English instruments such as derivatives as well as the accuracy of meanings (Schmitt, 2010) are used for assessing knowledge of language networks, whereas vocabulary depth evaluates several facets of vocabulary knowledge.

Difference between Vocabulary Size and Vocabulary Depth

The study by Nurweni & Read (1999) makes the relationship between VS and VD more clear. The researchers investigated the vocabulary abilities of first-year undergraduates in Indonesia. The intention was to gauge how well pupils knew the most prevalent academic vocabulary. The amount and depth of these learners' vocabulary were assessed by the researchers as part of a correlation study. Overall, they only found a weak relationship between the two metrics. They noticed that the association varied depending on skill level when they divided their participants into 3 groups. The high-level students' link among depth and breadth of vocabulary was considerable (r = 0.81), showing that not only did they know the majority of the words examined, but they frequently also knew them well. Only a weak correlation (r = 0.43) existed between the pupils' VS and VD. In contrast, there was no connection between the VS and VD scores for the children in the low group. Rashidi & Khosravi (2010) examined the breadth and depth of word knowledge among 38 university students in Iran. In almost the same session, all of the exams were administered concurrently. The findings indicate a favorable relationship among reading comprehension or depth and size. The vocabulary size (55%), and vocabulary depth explained a more pronounced difference in reading comprehension (69%) than did vocabulary size. Additionally, they saw that L2 students who had a large and deep vocabulary scored well in reading comprehension, which suggested that depth and size could enhance reading comprehension. The importance of vocabulary knowledge in the procedure of collecting new words is obvious. (Akbarian, 2010). In this study, Iranian ESP and EAP learners' interactions with VS and VD are examined. The participants include 112 ESP students from an Iranian university. The findings show that the variances of the Vocabulary Level Test (VLT) and Depth of Vocabulary Knowledge (DVK) scores were similar. However, when the individuals were based on two groups based on low and high scores on the VLT, the shared variances changed. According to the researcher, the DVK test does not assess language depth. This test, which looks like it would evaluate the depth, really measures width. Zano & Phatudi (2019) examined that at how Grade 11 English as a Foreign Language learners were affected by the English vocabulary of academics. VS and VD were assessed using WAT and VLT, respectively. The analysis of the data showed that depth and vocabulary size were significant determinants, DVK seemed to be a more accurate predictor than vocabulary knowledge breadth. The results also demonstrate a high correlation between vocabulary breadth and depth. Rahman (2019) looked into the connection between reading comprehension and the breadth and depth of vocabulary knowledge in Islamabad's public secondary schools. Four tests—the Word Associate Test, Reading Comprehension Test, Vocabulary Level Test, and Morphological Knowledge Test—and a sample size of 124 students were employed in the study. The Pearson correlation coefficient was used to compare the variations in vocabulary depth and vocabulary breadth. The findings showed a weak correlation between vocabulary breadth and reading comprehension and a modest association between vocabulary depth and understanding. According to regression analysis, vocabulary depth is more

predictable than vocabulary breadth. There is not a single study that specifically addresses Pakistani IELTS test takers and deals with a sizable population, although various studies linking vocabulary size to other sub-abilities have been conducted throughout the world. The literature on this topic was carefully examined, and it was discovered that there is no research on IELTS test takers using VST and WAT scores to examine the extent of the relationship between receptive vocabulary size and vocabulary depth language skills and analyze the relationship using simple linear regression and the Correlation test. The current study makes an effort to connect the receptive vocabulary size with the speaking abilities of IELTS test takers to close this gap in the body of literature.

Research Methodology

Research Design

Every member of the sample has their VST and WAT results, and the outcomes of the two variables are then correlated. A correlation coefficient is used to represent the outcome and illustrate how VST and WAT are related.

Sampling and Sample size

Non-random convenience sampling was adopted by the researcher. Using samples that appear to be conveniently available to the researcher, such as captive or willing individuals, is referred to as convenience sampling. From several IELTS academies, 95 male, as well as 75 female students, were chosen in Multan, Sargodha Faisalabad, Islamabad, Multan, and Bahawalpur. The participants ranged in age from 18 to 23. Participants in this research were Pakistanis who were studying English as a second language abroad under various circumstances, specifically in IELTS training centers in Pakistan. The study's participants had all been in school for at least 12 years.

Data collection procedure

The researcher was granted permission to collect data from IELTS institutions by the Government College University of Faisalabad department. Which department? The researcher contacted the academy's administration to collect data. None of the students was permitted to depart their classroom without the test in hand, ensuring that the data collection procedure was finished during the lecture. Data collection in Multan, Sargodha Faisalabad, Islamabad, Multan, and Bahawalpur took four months. As the academies offered complete cooperation, the researcher discussed the administration procedure with the head of the IELTS academies.

Students were informed that what they submitted would be used and mentioned under a pseudonym and that the data they provided would stay confidential. Students received notice that the results of their tests would be emailed to the personal email addresses that they provided when filling out their demographic information. This approach piqued participants' interest in taking the test. After finishing the VST, they returned it to the examiner and used the remaining time to complete the WAT. When the test was over, they were told to fill out the Demographic Information Sheet and turn it in to the invigilator. Following the completion of the submission, the researcher acquired all of the tests. One point was awarded for each right response. For wrong answers, there was no deduction of points. The researchers utilized a key to verify that the scoring was accurate based on the sample responses included in the online test.

Instruments

The researcher applied two quantitative tools for this research. The learner's vocabulary size was measured using a vocabulary size test (VST), which contains fourteen frequency levels. The Word Associations Test (WAT) was the second tool used to evaluate the depth of vocabulary.

Vocabulary size test

The test was created by Nation (1983) to evaluate a learner's vocabulary size. A reliable, accurate, and thorough assessment of a learner's receptive vocabulary size

covering the first 1,000 to 14,000 English word families was made possible by the Vocabulary Size Test (Schmitt 2010). The VST is divided into five sections: 2000, 3000, 5000, 10000, and 14,000 words for university students. Each test item belongs to a different family of 100 words. It is assumed that a test taker is familiar with the most prevalent 14,000-word categories in the English language if they correctly respond to every question.

Word Association Test

The Word Associates Test was created by Read (1993) to vocabulary depth. The recent version of the vocabulary depth (Read, 1994; 1995) has 40 items that evaluate meaning or collocation, or the paradigmatic and syntagmatic, two aspects of vocabulary knowledge. The maximum score for the Word Associates Test scoring system was 160.

Data Analysis

Quantitative data were acquired for this study. To find the answers to the research questions, the entire data set underwent statistical analysis. Four steps of the data analysis, all with different goals, were involved. SPSS was selected for the statistical analysis in this study for two reasons. It was initially developed for social science statistical analysis. Second, variance regression can be found using a tool in SPSS. The data of the male and female categories as well as the main and minor cities in Pakistan were analyzed using the independent sample t-test. The independent t-test's fundamental assumptions were verified before t-tests were run. This section can be shifted to the methodology. The VST was subjected to the Kolmogorov-Smirnov normality test to see whether the data were distributed regularly. The results of the Kolmogorov-Smirnov Test of Normality for male performance on VST (K-S test statistic (D).09666) reveal the normal distribution of the data (*p*-value. 26744). The findings of the Kolmogorov-Smirnov Test of Normality for female performance on VST (K-S test statistic (D) .08754) reveal the normal distribution of the data (*p*-value .57381). The findings of the Kolmogorov-Smirnov Test of Normality for male performance on WAT (K-S test statistic (D) .06748) reveal the normal distribution of the data (*p*-value .70509). The findings of the Kolmogorov-Smirnov Test of Normality for female performance on WAT (K-S test statistic (D) .10176) reveal that the data is normally distributed (*p*-value .30115).

The Pearson correlation was initially chosen to determine the answer to the research questions following the T-test. The Pearson correlation's underlying presumptions were verified before moving on to create the results. The data, which were presented as pairs and had no outliers, were on an interval scale. Data linearity was examined using scatterplots. The data was linear, as demonstrated by the scatterplots. Levene's test for homogeneity of variances reveals that the assumption was not violated. A Simple Linear Regression was run to check the relationship between a student's vocabulary size and vocabulary depth. Before running the regression analysis, the fundamental assumptions were checked. Since the sample came from a diverse population, independence was met. Grubb's outlier test (ESD) was calculated for both independent (VST) and dependent variables (WAT). The test identified one outlier in the VST data (score 26) and one in the WAT data (score 148). Both these cases were removed before running a regression.

The results obtained on the WAT, which serves as the dependent variable, match the requirements for a certain kind of dependent variable because they are scored on an interval scale. A scatter plot was used to evaluate the linearity between X (VST) and Y (WAT), and it exhibits no irregularities.

Results

Descriptive of the Statistics

The mean value and SD of the total sample's VST and WAT scores were computed to offer an overall profile of the entire group. This section highlights the statistics

description of the total sample's marks and summarizes the means and standard deviations of students' VST and WAT marks to demonstrate their distribution.

Table 4.1

Descriptive statistics of VST and WAT of the total participants (170)

	N	Range	Mean	Std. Deviation
VST	170	88.0	83.750	14.7483
WAT	170	79.0	99.370	11.8546

Comparison Scores on VST and WAT

Major and Minor cities

Certain descriptive data were produced using the students' VST and WAT scores. Before the data analysis, some normality analyses were conducted. During the entire test, the VST and WAT outcomes were regularly distributed.

Major and Minor Cities Scores on VST

Q1. *There is any difference among the test takers of IELTS on the marks of VST in major and minor cities of Punjab, Pakistan*

Table 4.2 summarizes the descriptive statistics of major and minor cities' VST scores to show how they were distributed

Table. 4.2

Descriptive Statistics of Major and Minor Cities Scores on VST (N=170)

		N	Mean	Std. Deviation	Std. Error Mean
VST	Major	98	83.581	16.2787	1.5886
	Minor	72	83.826	15.2162	1.6408

Certain descriptive data were produced using the students' VST and WAT scores. Before the data analysis, some normality analyses were conducted. During the entire test, the VST and WAT outcomes were regularly distributed.

Table 4.3

		N	Mean	Std. Deviation	Std. Error Mean
WAT	Major	98	98.310	11.320	1.2319
	Minor	72	92.110	10.2191	1.3271

Independent Sample T-test of Major and Minor Cities difference on VST

		Levene's Test for Equality of Variances		t-test for Equality of Means					
		F	Sig.	T	df	Sig. Mean (2-Different tailed)	Std. Error Difference	95% Confidence Interval of the Difference Lower	Upper
VST	Equal variances assumed	.009	.924	-.106	189	.915	-.2446	2.2993	-4.7802	4.2910
	Equal variances not assumed			-.107	185	.915	-.2446	2.2839	-4.7503	4.2610

The findings of Levene's test show that the assumption of equal group variance was satisfied (.924 for VST). Table 4.3 provides descriptive information on major and minor city learners as well as a t-test that compares the two groups. The independent sample test contrasts Pakistan's major cities' mean and mean total vocabulary tests with those of its smaller cities. Which differences and similarities in these two groups did you find? There is no difference between the VST scores of major cities and minor cities according to the independent sample t-test (170) =-.924, p =.915. As a result, the VST accepts the premise that there is no difference between the two groups.

Major and Minor Cities Scores on WAT

Q2. *There is any difference among the test takers of IELTS on the marks of WAT in major and minor cities of Punjab, Pakistan.*

Table 4.4 summarizes the descriptive statistics of major and minor cities' WAT scores to show how they were distributed

Table 4.4

Descriptive Statistics of Major and Minor Cities Scores on WAT for the total sample (N=170)

There wasn't much of a difference in the WAT test results for major cities (M=98.3, SD=11.32) and minor cities (M=92.11, SD=10.21), according to Table 4.4's descriptive data. Later, the magnitude of this difference and the significance of this

difference were assessed using an independent sample t-test.

Independent Sample T-test for Major and Minor Cities Comparison on WAT

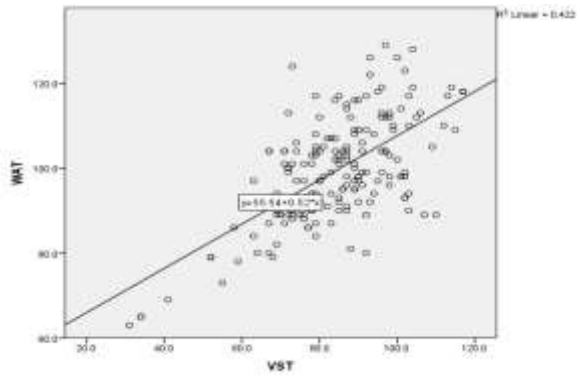
The findings of Levene's test show that the assumption of equal group variance was satisfied (.234 for WAT). There is no difference between the WAT scores of major cities or minor cities according to the independent sample t-test (170) =-.234, p =.224. Therefore, the WAT accepts the premise that there is no difference between the two groups.

Correlation between Vocabulary Size and Depth

Q3. *There is any correlation among the test takers of IELTS on the marks of VST and WAT*

The degree and direction of a linear relationship between two variables is measured by the correlation coefficient, or r, of a scatterplot, which is always between +1 and -1. A strong linear correlation between the two variables and movement in that direction is indicated by values that are close to 1. A value close to -1 denotes a strong connection between the two variables due to the opposing movement. A number that is very near zero serves as the final clue that the variables are not related.

Correlation scatterplot between VST and WAT



In this scatterplot, the dots all fell in a perfectly straight line. This line clearly shows how closely VST and WAT are related. If both the X and Y variables increase, then there is a positive correlation. It suggests that as the value of one variable increases, so will the value of the other. The elements are interconnected. The scatterplot has a fitted line. The link between vocabulary size and vocabulary depth is shown by this fitted line plot. The graph and descriptive statistics both show data from the same model.

Table. 4.5

Pearson product-moment Correlation between VST and WAT

		VST	WAT
VST	Pearson Correlation	1	.610**
	Sig. (2-tailed)		.000
	N	170	170
WAT	Pearson Correlation	.610**	1
	Sig. (2-tailed)	.000	
	N	170	170

Table. 4.5 displays the findings of the correlation analysis, which show a correlation between students' VST and WAT scores. The VST and WAT had a positive connection, with values of r = 0.610, n = 171, and p = 0.000. This demonstrates a weakly positive association between the VST and WAT, r =.61, p .001. The VST and WAT scores for the two language tests have a moderate association, according to the data. It emphasizes the relationship between vocabulary knowledge's size and depth—the two vocabulary knowledge categories that were examined in the current literature evaluation. Another study from this stage revealed that, because vocabulary quantity was found to be a more accurate indicator of depth, it is essential for learning a second language.

Discussion

There was little distinction between Pakistan's major cities and its smaller ones on the VST. In Pakistan, learners living in major cities receive the same instruction in frequently used terminology as learners in smaller cities. This conclusion is consistent with Chui (2006) research. The VST used in this study showed that participants from Shenzhen and Shanghai received the same scores as students from other parts of China. Particularly in terms of performance, learners from each of these major cities were on par

with those from Hong Kong. It is important to note that the participants in the current research were graduate students, whereas Chui's study's respondents were intermediate students. Do not use contraction. The majority of Chui's participants, nevertheless, were from Hong Kong and went to schools with an English-only curriculum. As opposed to the minority in Chui's study, all of our participants were from major and minor cities in Pakistan and had received education in Pakistani Urdu. The language of instruction in Pakistan is Urdu. The results of this research diverge from those of Alkhofi (2009). Spanish-speaking students in this study (M = 3471, SD = 471, N = 12) had a larger total vocabulary than Arabic-speaking students (M = 2825, SD = 1006, N = 28), according to an independent t-test. The 79 intermediate levels provided the data. The 2K, 3K, 5K, and 10K settings of the VST were employed by the researcher. Participants in this study were at an intermediate level. Although undergraduate and graduate learners participated in the present study, the findings varied from those of the current study. In the WAT, there was no statistical distinction between large and minor cities in Pakistan. Students from major cities in Pakistan utilized the same vocabulary as students from smaller cities. There had never been a scholarly distinction between the WAT cities before. The size and depth of vocabulary knowledge are related, as seen by the positive connection (r =.61) between VST and WAT. This finding supports the contention made by Read (2004) that size and depth are not mutually exclusive concepts. Additionally, it is consistent with other studies (Schmitt & Meara 1997) that found an r =.60 correlation between vocabulary size as well as vocabulary depth. Other studies found greater correlation coefficients (r =.82, r =.81, and r =.82, respectively) than the current research (Nurweni & Read 1999; Qian 1999).

Conclusion

The key finding is that the results suggest that non-advanced learners' performance is significantly influenced by their size and depth of vocabulary. Vocabulary knowledge seems to become less important as students improve; very advanced students appear to perform highly on the VST and WAT. Higher proficiency learners are more likely to possess a variety of extra skills that will help them deal with potential difficulties in their L2, including advanced linguistic knowledge, listening abilities, and reading techniques. In contrast to previous stages of proficiency, it appears that VS and VD have a more significant impact on comprehension in the nascent and less advanced phases of competence. These studies show that learning a new language requires a strong vocabulary. Show language competence and skills in your analysis. The findings of the recent research have practical significance for teaching second languages even though they cannot be generalized to other contexts. Those who test, practice, or the depth and size of the vocabulary should both be given more consideration in teaching. To assist students in enhancing their vocabulary understanding, teachers must also make an effort to create a wide variety of vocabulary sizes or depth assessments. Teachers should also focus on expanding and improving their pupils' vocabulary as part of their vocabulary instruction. All of our IELTS test takers have low vocabulary proficiency levels as a result, it presents a challenge for language teachers and problems for their academic career.

Recommendations

More quantitative research approaches should be used to examine the scope and depth of learners at different stages of the educational system. Such a study would offer objective evaluations of Pakistan's many programs. Quantitative vocabulary investigations are also required to assess the graduates of English programs on their vocabulary abilities. University students, program designers, or teachers can use this information to give their students the skills they need to thrive in their career options as

English instructors, translators, or any other occupation they choose. The findings allow comparisons between Punjabi university students and those from other provinces. The results of the current study cannot be generalized to the entire population due to several limitations. Because just a tiny section of the population participated in this study, future research may use a larger sample size and population to generalize the findings. The current study concentrated on the instrument's validation, and more research utilizing these research tools is required. Researchers created a graded vocabulary level to evaluate students' mastery of vocabulary used in written textbooks that are exclusively available for Federal Board of Intermediate and Secondary Education secondary school certificate exams. There should be more studies done to evaluate students' understanding of other English textbooks that are offered to students in different grade levels and testing systems.

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