



**RESEARCH PAPER**

**A Study of Morpheme Intervention for Classroom Teaching and its Impacts on Students' Vocabulary**

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**ABSTRACT**

This study places a strong emphasis on the use of morphological strategies that are utilized in reading comprehension in order to improve students' vocabulary awareness of prefixes and suffixes and to contribute to the growth of vocabulary acquisition. The main objective of the study was to know the impact of morphological intervention on student's vocabulary. The research was experimentally based (a pre-test and a post-test) was taken from the children of grade 8. This literature study was carried out to combine the findings of research into an evaluation of whether or not such training led to an improvement in the participant's comprehension of reading as well as the growth of their vocabulary. In the first step of the study process, researchers need to gather material that is pertinent to the morphological and instructional techniques involved in the process of teaching and learning English. Second, researchers have the opportunity to do data analysis on the benefits and drawbacks of morphological tactics and instructional methods used in the context of the English language teaching and learning process. Thirdly, researchers found that students play a significant part in morphological intervention, and they found that there is a need to use morphological techniques in order to assist second language learners in acquiring English language abilities. Learners may draw some crucial conclusions about the implementation of morphological learning techniques to engage the teaching and learning process.

**Keywords:** Classroom, morpheme, teaching, vocabulary

**Introduction**

Targeting children's morphological development in three areas—morphological knowledge, morphological awareness, and morphological analysis—is what's meant by "morphological-based intervention" (or word analysis). Morphological knowledge is an individual's implicit knowledge of morphology, and it entails an awareness of and the capacity to modify the internal word structures of words (Smith Gabig, & Zaretsky 2013). Students need to have morphological awareness in order to use morphological analysis, which is a cognitive strategy for determining the meaning of unknown morphologically complex words by making use of prior knowledge of the individual morphemes that make up those words. Morphological awareness is required for students to use morphological analysis (Kieffer & Lesaux, 2007). The ability to independently analyze these words morphologically is regarded as a valuable strategy for self-directed vocabulary growth (Bowers & Kirby, 2010; Kieffer & Lesaux, 2007). This is because the majority of new words that school-age students encounter while reading include derivational morphemes (Nagy & Anderson, 1984). Morphological analysis is also included in the vocabulary section of the Common Core State Standards (National Governors Association Center for Best Practices and Council of Chief State School Officers, 2010; Smith Gabig, & Zaretsky, 2013), which

makes it a prioritized focus in many schools across the country. Smith Gabig and Zaretsky (2013).

In recent years, a number of reviews and meta-analyses have described the effects of morphological-based interventions on literacy skills, including vocabulary, spelling, and reading, for students who are typically developing (Bowers, Kirby, & Deacon, 2010; Carlisle, 2010; Goodwin & Ahn, 2013; Reed, 2008) as well as for students who have difficulties with literacy (Reed, 2008). Specifically, these reviews and meta-analyses have focused on the effects of these interventions on (Goodwin & Ahn, 2010). The goal of these types of treatments is to increase children's awareness of prefixes and suffixes, bases, complex words, word origins, spoken morphology, written morphology, and spelling patterns (Bowers, Kirby, & Deacon, 2010). The learning of students is supported by a number of different strategies, some of which are as follows: (a) analyzing words for their constituent morphemes; (b) synthesizing the meanings of individual morphemes to predict the meanings of complex words; (c) producing morphologically complex words in cloze or analogy tasks; and (d) engaging in problem solving to determine the meaning of unknown morphologically complex words (Bowers, Kirby, & Deacon, 2010). The findings of these evaluations indicate, in general, that morphologically-based interventions have good and practically significant benefits on the vocabulary knowledge of pupils. These evaluations, on the other hand, have not focused explicitly on children who have difficulty with language acquisition.

"Vocabulary should be weaved into the fabric of everything that is being studied since it is an essential basic thread in the tapestry of reading" (Tankersley 2005: 66). There is a substantial amount of research that demonstrates the close connection between vocabulary knowledge and the ability to comprehend what is read (e.g. Lauer 1998; 2001; Nation 2001; 2006; Carlisle 2004; Oakhill et al. 2015). According to Tankersley (2005: 108), comprehension "...is the process of deriving meaning from words; it is the essence of reading, important to both academic and lifelong learning."

Morphemes are the smallest and most basic units in the study of morphology. The scientific study of language is known as linguistics, and one of the primary disciplines of linguistics that contributes to the development of new words is called morphology. It is possible to make up new words, borrow them from other languages, or replace existing ones. In the year 1859, the word "morphology" was first used by the German linguist August Schleicher. The study of structures in which sound forms emerge among the components is how Bloomfield characterizes this branch of research. According to a different linguist named Dorfman, morphology is the study of the many ways and techniques that sounds may be combined to create sound complexes or words.

Words and morphemes are intrinsically connected because morphemes may be combined to form new words. While it is not possible for morphemes to convey meaning on their own, words may. Some morphemes are capable of functioning on their own, while others cannot; the meaning of these latter morphemes is always dependent on the existence of other morphemes or syllables.

Morphemes are the fundamental units of morphology and are responsible for an essential part of the process of meaning generation. Reading, spelling, vocabulary, and comprehension are all examples of language abilities that benefit greatly from phonics instruction. Therefore, the smallest unit of grammatical structure that repeats itself is called a morpheme. Morphemes have a discrete phonemic form, a specific grammatical function, and phonological manifestations that might change.

They are constructed using syllables in various ways. There are morphemes that have one syllable (referred to as mono-syllabic), two syllables (referred to as disyllabic), and numerous syllables (referred to as poly-syllabic). They also offer a variety of subcategories to choose from.

Reading, listening, writing, and communicating orally are the four aspects of language proficiency that benefit greatly from increased vocabulary. It is incredibly important for students' ability to understand what they read and has a bearing on how effectively students can comprehend the material they encounter in college. If one morpheme is substituted for another in any manner, the meaning of the phrase as a whole might shift. When it comes to learning or acquiring any language, it is quite difficult to ignore the importance of having a large vocabulary. Reading, comprehension, and effective communication all need an extensive vocabulary to function well. If a student has a limited vocabulary, both their comprehension and their fluency will suffer as a result. Therefore, education instructors and teachers need to expose learners' goals for acquiring useful language that will serve them throughout their lives. Because of this, it is necessary for one to be able to know words, comprehend their meanings, and put those meanings into practice. Therefore, it is essential for youngsters to be familiar with morphemes from the very beginning of their educational careers and while they are actively expanding their vocabularies. By separating the word into its component syllables, it makes it easier for kids to remember the term, and it also makes it simpler for them to acquire new vocabulary.

### **Literature Review**

Learners have had difficulty with academic vocabulary for a number of reasons, one of which is that the English language is a very sophisticated language. Latin, Greek, and German have all been included into the development of the English language, as stated by Ebbers and Denton. The intricate sociopolitical history of the English language has led to the development of a modern language that contains a significant number of phonetic and morphological anomalies (Ebbers & Denton, 2008).

Reading is an essential component of the educational process. When students are not taught how to pay attention to the more sophisticated grammar, sentence structures, and removal of understanding scaffolding mechanisms in secondary literature, they have difficulty keeping up with the more challenging material as it becomes more intricate (Fang & Schleppegrell, 2010).

There has been a lot of research done on morphemic intervention in the past, but the pupils in grade eight at The Knowledge School in Sanjarpur, which is situated in the Rahim yar Khan District of Pakistan, are going to be the subjects of my morphemic intervention study. This study's primary objective is to investigate the influence of morphemes on the vocabulary of students. In addition, the study demonstrates that the use of morphemes has a more positive effect on students' vocabulary than more conventional methods of learning vocabulary, and it examines the influence of morphemes on the teaching and learning that takes place in the classroom. The following are some earlier studies that have been conducted on the morphemic intervention, as well as the findings of those studies.

Because of the aforementioned facts, as well as other linguistic, historical, and socioeconomic factors, an alarmingly high number of primary school students do not possess the reading abilities essential to be successful in high school and beyond. A significant number of adolescents, in particular, have difficulty comprehending difficult texts, interacting socially in academic contexts, and communicating online in ways that are acceptable and relevant (Wendt, 2013).

As a direct consequence of this, the educational system in the United States was not intended to alter the reality of those who fall behind or who enter the system already behind. In 1986, Stanovich came up with the term "The Matthew Effect," which contends that the wealthy would continue to amass wealth while the poor will fall farther and further behind. The Matthew Effect summarizes the experiences of a large number of students with vocabulary acquisition as well as the need of vocabulary acquisition for vocabulary acquisition. Students have more resources at their disposal to acquire a new academic

language in proportion to the size of the academic vocabulary bank that they already possess (Stanovich, 1986).

Research on vocabulary acquisition is crucial not just because many students lack adequate vocabulary to access academic English, but also because there is no easy or rapid solution to the issue. Many students lack sufficient vocabulary to access academic English. Numerous academics are of the opinion that the most effective method to go forward is to mix a number of different best practices and strategies.

The research done by Biancarosa (2012) has helped to improve vocabulary acquisition by indicating that the issue must not be totally focused on scaffolding down to those learners who have fallen behind. This demonstrates that the emphasis of the problem should be shifted away from those students. Not only should the research and implementation of best practices center on remediation, but they should also center on the skills that students need to thrive in the professional and collegiate contexts in which they will be working. Students need to understand how to organize their ideas, make connections to prior information, grasp a variety of settings, effectively do research, and modify their reading skills as necessary to assess their level of understanding.

Because of this, academics need to make a significant paradigm change. In spite of the fact that vocabulary is the bedrock upon which reading is built, it is usually neglected and not taught in subject areas. In order to adapt their new role as language experts, primary school teachers need to adjust their conventional perspective on content-based education and widen it.

According to the findings of research carried out in this field, the two primary areas of study that make a significant contribution to successful academic vocabulary acquisition are school psychology and instructional techniques. When it comes to the psychology of schools and the environments they provide, researchers have identified three common elements. To begin, research conducted by Main (2008) found that students' levels of engagement significantly increased when they believed success was achievable for them and actively participated in the process of defining what it meant to be successful. In 2012, Feezell reiterated the concept that students are more likely to absorb and connect to a language if they have a voice in the books and terminology that they are learning. This increases the likelihood that students will acquire more vocabulary as a result.

This method of instructing students is ineffective when readers do not possess the fundamental vocabulary necessary to comprehend the majority of the written content or when the text is outside of their zone of proximal development.

Another approach to education is the use of cognitive and metacognitive word acquisition strategies, which may include contextual and morphological examination. Students will benefit from these strategies because they will be better able to infer the meaning of unfamiliar words based on the context in which they are used and on morphological cues.

According to Nagy, readers may be helped to answer unfamiliar words anywhere from 5% to 11% of the time by the use of context cues, which include exposing the unknown words to natural context. The fact that this technique may provide less effective outcomes when used to learners with varying levels of knowledge and experience is one of the most noteworthy limitations of this instructional approach.

On the other hand, morphological analysis has a little bit more potential for students, especially those coming from a variety of backgrounds. It has been shown that morphemes are capable of predicting sixty percent of the word meanings in written school English in grades three through nine. By using this method of teaching, students are guided through the process of recognizing and comprehending Greek and Latin root words, in addition to

prefixes and suffixes. Students' comprehension of language's fundamental components has a significant impact on how well they are able to decipher the meanings of words they are not familiar with. Research indicates that inflectional suffixes need to be presented in the classroom first, followed by prefixes.

The next step is the application of derivational suffixes, which are a great deal more difficult and have the ability to alter the parts of speech. After the morphemic analysis has been established, the last step in the process should be the teaching of Greek and Latin.

When determining the pedagogical sequence, it is important to keep in mind that the meaning of words with Greek origins tends to be more stable than the meaning of words with Latin roots, therefore this should be taken into account. Contextual analysis and morphological analysis are the two approaches to solving word problems, and it has been determined that they should be taught concurrently for the greatest possible outcomes. Students are able to properly guess the meaning of unknown words 71% of the time when the context clues study is partnered with the morphemic clues study. The development of vocabulary may be improved by encouraging collaborative learning and providing chances for practice. Some of the methods that may be used to assist with this concern include interactive reading out loud, text-based discussions, gaming stations, and opinion stations. Many linguists believe that the majority of learning takes place in social settings, and because social interactions are dependent on vocabulary, it seems sense that learning vocabulary should take place in a social setting. Explicit teaching is combined with the broad reading methods that were discussed before in this method's last iteration. Although they are useful, they are not sufficient to teach pupils all of the vocabulary that is required for success in post-secondary schools and much further in life.

### **Material and Methods**

The research in this study that was experimentally based (a pre-test and a post-test) on the children in grade 8 at "The Knowledge School, Sanjarpur." Over the course of a six-lesson intervention session, a group of intervention students were particularly instructed to learn certain high-occurrence morphemes in a classroom that was set apart exclusively for that purpose. Cooperation among students and a variety of approaches to the conversation were employed as strategies to broaden students' interest in the issue.

The students had to take a pretest in order to qualify for the first intervention session, and then they had to take a posttest in order to qualify for the final intervention lesson.

The procedure used in order to collect and analyze numerical findings. It is possible to use it to seek for patterns and averages, evaluate causal linkages, make predictions, and extrapolate findings to bigger groups. The purpose of this research was to evaluate the impacts that would occur as a result of students using morphemic analysis as a tool when coming across unfamiliar vocabulary in their English textbook. The purpose of this research is to investigate the impact that morphemic analysis has on students who have just graduated from an English language instruction course at a multicultural urban high school in the Sanjarpur area of Pakistan, which is located within the Rahim yar Khan district. The quantitative methods research paradigm that was used in this research.

### **Participants' of the Study**

A total of twenty-five pupils in the eighth grade from "The Knowledge School, Sanjarpur" volunteered to participate in this study. They did not discriminate on the basis of gender and there were both males and females there. Students in the class ranged in age from 15 to 16 years old.

It's likely that all of the pupils were at the same level of cognition. This was shown by the administration of a pre-test to the individuals who were being targeted. The findings

indicated that their mental abilities were comparable, and that they had been studying the English language for an equivalent amount of time. At the time that the research was being conducted, all of the participants were required to complete certain coursework in English, including reading, writing, listening, and speaking in the language. Everyone who took part in the study was an individual who did not have English as their first language. They came from various cultural and social backgrounds. 14 of them were native speakers of the Punjabi language and came from households that were considered to be lower middle class. The remaining student's first language was Saraiki, and they were from upper-middle-class households with educational backgrounds. Seven of the students were natural speakers of the national language, which is Urdu, and they belonged to educated families. When it comes to studies like these, the student's history is of critical importance. It is beneficial to the researcher in that it helps get more accurate research.

### **Procedure**

Students were given the opportunity to participate in an intervention study in which they were taught common morphemes that are often seen in their English textbook. During the intervention phase, students were given a pre-assessment as well as a post-assessment to see how well they were able to apply the vocabulary strategy of evaluating morphemes to determine the meaning of academic vocabulary items that were previously unfamiliar to them. Although it is outside the purview of this investigation, one question that occurs to me is whether or not the application of morphemic analysis in regular school settings could serve as a method for assisting students in achieving higher levels of comprehension of academic vocabulary words that are unfamiliar to them. The researcher work in a school that serves a diverse student population, and often find herself wondering how morphemic analysis tools may be especially advantageous to the children who are learning a language. The researcher also wonder how these tools could be beneficial to students who attend schools different than mine. If the use of morphemic analysis treatments can contribute to the expanding body of research that supports the discipline, then possibly morphemic analysis might be an additional tool that can be used to eliminate inequality in our educational systems. The researcher was enthusiastic about morphemic intervention because, in the long run, it may be able to assist a substantial number of students in gaining access to academic English, which serves as a key to many possibilities.

### **Pre-Test**

First and foremost, a pre-test was carried out to evaluate the level of knowledge and comprehension that the individuals had about morphemes and vocabulary. This test was carried out so that it could be determined whether or not the test participants are comparable in terms of their mental stage. The purpose of the exam was to evaluate the students in the experimental group to see how their knowledge had progressed. The pre-test helped me understand their knowledge and their requirements better, as well as what I should teach them and how I should teach it to them in an effective manner.

### **Post-Test**

Following a period of many days during which the topic was evaluated using a variety of listening, reading, writing, and writing tasks, a post-test was carried out to evaluate the effectiveness of vocabulary in contributing to the development of the aforementioned four language abilities. During this test, the noises made by the individuals were recorded and evaluated once again to see whether or not there was a change as a result of the morphemic intervention experiments. After one month and 15 days, the students were given a post-test to determine whether or not they had improved since the beginning of the semester. The test's standard was somewhat more challenging as compared to the pre-level tests of difficulty. The abilities of reading, listening, writing, and speaking were emphasized throughout the course as well.

## Elaboration of Experimental Stage

The experimental part of the investigation was where we found the majority of our answers. The participants were put through a variety of exercises and examinations throughout this stage, which lasted for a couple of days. These kinds of routines were included into the program on several occasions. This procedure carried on for a total of one month. During this period, numerous tactics and drills were used in accordance with the prerequisites of these exercises. These included imitation of words and phrases at the morphemic level, repetition, and work in pairs and groups. Following the completion of the experimental phase that lasted a few days, a post-test was carried out.

## Data Analysis and Data Interpretation

Throughout the investigation, the researcher used an experimental method. Both a pre-test and a post-test were carried out. After that, the researcher used SPSS to conduct an analysis of the variance in the findings of the pre-test and post-test.

When it came time to quantify the differences in the results, the researcher turned to the paired-samples t-test. When there is only one group of individuals to collect data from, but we need to do it on two separate times, this is called a single-group study. The researcher collected data and information from 25 pupils at The Knowledge School using a paired samples t-test. The eta squared formula is what is utilized for determining the effect size of the paired sample t-test.

In this research, the data that was acquired from the pre-tests as well as the post-tests are discussed, analyzed, and interpreted. SPSS volume 23 is used to do the analysis on the data. The information that was gathered is given below in the form of tables.

**Table 1**  
**Independent T test Control and Experimental Group**

Test	N	M	SD	df	p-value	t-value
Pre-Test C	25	15.42	1.59	24	.139	.238
Pre-Test E	25	15.33	1.95			

The above-mentioned table reveals the independent t-test of the control experimental group for the pre-test. In this test, no of the participants were 25. The mean value of the pretest for the control group is 15.42 and the mean value of the pretest for the experimental group is 15.33. SD value for both the tests is 1.59 and 1.945 respectively. The value of d is 24, and the value of t is obtained as .238.

**Table 2**  
**Independent T test Control and Experimental Group**

Test	N	M	SD	df	p-value	t-value	Effect Size
Post-Test C	25	24.70	1.64	24	0.00	-24.63	0.03
Post-Test E	25	43.95	3.08				

The above-mentioned table reveals the independent t-test of the control experimental group for the post-test. In this test, no. of participants was 25. The mean value of the post-test for the control group is 24.70 and the mean value of the post-test for the experimental group is 43.95. SD value for both the tests is 1.64 and 3.08 respectively. The value of d is 24, p- value is 0.00, and the value of t is obtained as -24.63. The effect Size value is 0.3. Since the p-value is 0.00 and effect size is 0.09. Since p value is 0.05 so, it is concluded that there is a significant difference between these tests. Hence it shows that treatment given by the using technique of morphological instructions for the improving vocabulary proficiency skill is effective in ESL classrooms for teaching vocabulary at the primary level.

## **Implications**

The results of this study demonstrated that morphemic analysis does, in fact, have an impact on the process of acquiring new vocabulary. Reading practices that teach students to evaluate new words as they come across them are particularly beneficial for those who struggle with reading. Readers who struggle with comprehension are equipped with skills that allow them to face challenging material when they are able to look at individual word pieces (morphemes) and determine their meaning to assist them grasp the word. Because vocabulary has a direct influence on understanding, increasing one's vocabulary may directly lead to an increase in one's level of comprehension. Because texts for teenage readers are becoming exponentially more challenging, it is important to offer explicit ways for deriving meaning from terms that are not known to the reader. This will help the reader have a better grasp of the texts.

## **Conclusion**

It was expected that receiving training in morphemic analysis would have a beneficial effect on one's vocabulary as well as their ability to comprehend information. The results of these investigations lend credence to the aforementioned concept. After the session, the results suggested that participants' language abilities had greatly improved. In addition, cognitive abilities saw a considerable increase in improvement after the intervention. These findings provide weight to the existing body of research.

The purpose of this study was to determine whether or not the teaching of morphemic analysis would have a beneficial impact on the reader's vocabulary as well as their comprehension abilities. After the intervention, the findings that were gathered showed that both the participants' vocabulary and their understanding had significantly improved.

Reading study has shown that pupils use a variety of methods in order to comprehend what they read. Morphological analysis proven to be a method that assisted pupils in comprehending the words they were reading and, as a result, the passages they were studying. The findings of Stahl and Fairbanks (1986) provide credence to the concept that the methodical instruction of morphemic analysis has a direct influence on the vocabulary and understanding of students. According to estimates provided by Lehr, Osborn, and Hiebert (n.d.), around sixty percent of the newly encountered words have a morphological structure that may be recognized with relative ease. It would suggest that using morphemic analysis does really have a discernible impact on one's ability to acquire new language. Students are equipped with excellent skills that allow them to face academic texts that get increasingly more challenging when they have the ability to look at individual word pieces and determine their meaning to assist grasp the word. Given that vocabulary has a direct influence on understanding, increasing one's vocabulary leads to an increase in one's overall level of comprehension.

The results of this research have a few repercussions for those who work in the area of teaching languages other than English. The experiment produced data to support the hypothesis that morphemic analysis may play a role in the acquisition of language. As a result, a morphemic strategy for the education of vocabulary ought to be adopted in any vocabulary program that takes place in an EFL environment. Learners are able to deduce a portion of the meaning of a new word by associating a meaningful morpheme in a known word with the same meaningful morpheme in the new word via the use of this strategy. Because vocabulary has a direct influence on understanding, increasing one's vocabulary leads to an increase in their level of comprehension as a direct outcome.

The Nation's Vocabulary Levels Test is a tool that should be used by educators to ascertain the amount of focus that should be placed on the acquisition of vocabulary by their respective classes of pupils. Because the development of high-frequency vocabulary



requires a different program than the development of low-frequency vocabulary, this decision is cost-effective in terms of the use of class time to determine which vocabulary should be taught, as stated in (Laufer and Nation 1999: 35). This is because the development of low-frequency vocabulary requires a different program.

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