



**RESEARCH PAPER**

**The Effects of Morpheme Instructions on Spelling Proficiency of Students at Primary Level**

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**ABSTRACT**

The ability to modify derived words, recognize linkages between the many morphological forms of a word, and develop new derivations of words is what is meant by the term "teaching spellings through morphologically based instructions" in the field of English language teaching and learning. Teaching spellings through morphologically based instructions also refers to the process of teaching spellings through morphologically based instruction. In the current study, an effort was made to investigate the impact of morphological instruction on spelling improvements in relational, syntactic, and distributional aspects of derivational morphology, and in turn, its effects on English spelling learning for primary-level ESL students who were also learning English as a Foreign Language. The research included a total of 25 primary school pupils who were learning English as a second language. These students were randomly assigned to one of two groups: the experimental group or the control group.

**Keywords**

Morpheme Instruction, Spelling Proficiency, Primary Level

**Introduction**

The purpose of this research was to determine whether or not young children who speak German might benefit from participating in a spelling intervention that was based on morphemes. In addition to this, one of our goals was to investigate whether or not any increases in spelling (and reading) competence may be directly linked to advancements in morphological skills or whether or not they are just the result of an increase in orthographic knowledge. The education and intervention that was focused on morphemes had the goal of teaching youngsters how to recognize the semantic building blocks that are included inside morphologically complicated words (morphemes). For instance, the word "cowboy" may be broken down into its component parts, which are the stem morphemes "cow" and "boy." The morpheme that functions as the stem of the verb "played" is "play," while the morpheme that functions as the grammatical marker for the past tense is "-ed." There is a growing interest in morpheme-based instruction and intervention in children's reading acquisition (e.g., Bowers & Bowers, 2018; Bowers & Kirby, 2010), and a number of arguments in favor of such approaches within the context of Indo-European

languages have been proposed. Bowers & Bowers (2018) and Bowers & Kirby (2010) are two recent examples of this growing interest.

### **Spelling and Morpheme Awareness**

According to Paradis (2005), morphological awareness refers to the process of manipulating morphemes, which are linguistic units that carry meaning. The term "Morpheme" refers to the most fundamental level of meaning in any given language (Kim, 2014). Freestanding words like "walk," as well as words that have been "bound" to other morphemes, like "ing" in "walking," are examples (Cumming & Wood, 2009). Morpheme may also be subdivided into inflectional forms, which modify how a word functions grammatically but do not produce new words. For example, the word "skip" can be found in the forms skip, skipping, and skipped.

According to Jaeger et al (1996), research, morphological deconstruction of words is an essential part of the reading process for proficient readers because of its high level of relevance. According to Anderwald (2009), the training of morphemes may have an extra beneficial influence on the acquisition of English vocabulary, notably in the domain of spelling.

In addition, the proposed research will investigate the effect that students' exposure to morpheme teaching has on the development of their capacity to detect the existence of morphemes in words, specifically with regard to characteristics of derivational morphology. In addition, the students will concentrate on derivational phonemes in order to improve their ability to create new words. This research will also show how students' understanding of metaphors helps them develop their English language skills and motivates them to do so.

According to a number of studies, just having a grasp of morphemes on a surface level is sufficient to stimulate the development of reading and spelling abilities, as well as the growth of vocabulary. However, other research has shown that students may benefit more from receiving direct training in morphemic awareness, especially with regard to their spelling.

In English, like of many other languages, the relationship between the letters and the morphemes in a word is frequently easier to see than the correlation between the roots and the sound of the word (Campbell). When an affix is added to a word's pronunciation, it reveals a significant number of its origins. For instance, the words "muscle" and "muscular" have the same root morpheme, even if they are not pronounced in the same way when spoken out loud. On the basis of the aforementioned illustration, Nagy and Anderson (1995) said that we may assist our children with their spelling if we teach them the stable link between the two words via specific instructions.

### **Spelling and Prosody Awareness**

Reading ability may be accurately predicted, at least to some extent, by phonological information such as the capacity to recognize phonemes and rhymes, according to a number of studies. In addition, it was only recently established that sensitivity to speech prosody may also be a predictor of a child's eventual level of literacy.

Prosody is a term that is employed in linguistic theory to include all characteristics of grouping, rhythm, and emphasis in spoken language. This term comes from the Greek word for "prosodie," which means "pronunciation." This includes everything from the individual components of the syllable to the order in which the words are arranged inside the phrase. Prosody is a concept that is employed in linguistic theory, according to Pierrehumbert (2006)'s definition of the term.

The findings of a study carried out by Kouider et al. (2006) on two different groups of English-speaking children and adolescents revealed that metrical stress sensitivity may be able to account for some of the differences in spelling abilities. This was discovered after the researchers took into account both phonological awareness and vocabulary. According to the findings of this body of research, sensitivity to stress has an effect on the development of spelling in a way that is distinct from the contribution it makes to phonological representations. This is the case despite the fact that sensitivity to stress has been shown to play a role in the formation of phonological representations.

Additionally, the distribution of stress across the syllables of a word or phrase leads in a variety of distinct rhythmic rhythms. For example, let us inspect the record of the word's stress pattern. If we consider the term to be a noun, then the strong-weak stress configuration for the word would be Record. In contrast to the weak-to-strong stress pattern, the record verb would have its stresses reversed. Students who are having difficulty may have trouble processing stress patterns when reading silently, which is crucial for determining the meanings of individual words and how they work within sentences. Clapping out words with several syllables is a simple method that might improve one's awareness of stress patterns. Word identification, pronunciation, understanding, and spelling are all ultimately bolstered as a result.

### **Literature Review**

During their time in elementary school, children develop a broad array of skills that will aid them in becoming good readers and spellers. Two of these skills are reading and spelling. A significant amount of research has been conducted to both explain how children could develop these talents and to hypothesis about these capabilities (e.g., (Fejzo et al., 2018)). Having said that, there are certain youngsters who struggle in the aforementioned subject areas. Research on children's literacy in the past has frequently focused either on children who have been diagnosed with specific learning disabilities (e.g., (Hauerwas & Walker, 2003)), children who have participated in a training program to address literacy problems (e.g., Nunes, Bryant, & Olsson, 2003), or children who have participated in a combination of the two approaches (e.g., (Hauerwas & Walker, 2003)). In recent years, however, researchers have begun to (Bowers et al., 2010).

On the other hand, not nearly as much research has been conducted on children who have reading and spelling challenges despite the fact that they may not have any of the disorders that have already been recognized. The objective of this study was to evaluate the ways in which children with varying degrees of reading ability make use of morphological awareness while reading and spelling. This research also investigated whether or not experience with written and spoken language (measured in terms of chronological age) had a greater impact on the development of morphological awareness than reading ability does. Specifically, the question was asked: "Does experiences with written and spoken language have a

greater impact on the development of morphological awareness than reading ability. Understanding some of the fundamental factors involved in the process of learning to read and spell may provide information on how children who are having difficulty may be able to improve their abilities. This is because children can demonstrate a wide variety of abilities with regard to written language. In light of the fact that children can demonstrate a wide variety of abilities, it is important to gain an understanding of some of these fundamental factors.

The Components and Structures of Language Metalinguistic awareness is defined as the capability to think about language and the components that go into building up its system. This ability is often referred to as linguistic awareness (Tunmer, Herriman, & Nesdale, 1988). Reading and spelling are two forms of metalinguistic ability that entail the development of phonological awareness, syntactic awareness, morphological awareness, and pragmatic awareness. Phonological awareness is the most basic kind of metalinguistic ability (Lazo, Pumfrey, & Peers, 1997).

Because individual letters in the English alphabet often stand for the sounds that those letters represent, the English writing system is mostly alphabetic. However, the same letter might have a totally different sound when it comes in a different word, and other letters can be used to create specific sounds. This is because different letters are used to write distinct sounds. It is vital for children to have an understanding of the rules that must be followed in order for them to write and spell correctly in order for them to be able to acquire the requisite literacy skills and improve their metalinguistic awareness. Phonemes, as defined by Treiman and Kessler (2005), are the smallest individual sound segments that may be distinguished from one another within a language. The /f/ in "frill" and the "s" in "spice" are both instances of phonemes in the English language.

When it comes to the written form of the English language, it is not always the case that individual letters correspond to the sounds that they represent. In spite of the fact that there is not always a perfect one-to-one correlation between sounds and letters in the English language, the language still maintains what can be described as an alphabetic spelling system. For example, the letter c in the word "cell" is pronounced "s," but the letter c in the word "car" is pronounced "k." In spite of the fact that there is not always a perfect one-to-one correlation between sounds and letters in the English language, there is still a Because of this, it is vital to be able to dismantle words into their component sounds in order to read and write the words properly. This is also true for those who want to learn a foreign language.

Phonological awareness may be described as the ability to consider and make use of all levels of sounds that are present in spoken words (Stahl & Murray, 1994). Phonemic awareness is a more specific skill that relates to the potential to consciously think about the sequence in which phonemes occur in words. This ability is necessary for reading and writing correctly (Snow, Burns, & Griffin, 1998). For instance, a child exhibits some level of phonemic awareness if they are able to correctly identify the first sound in the word "dog" as a "d" sound. This is an example of phonemic awareness in action. Therefore, it would seem that developing phonological awareness is necessary in order to learn to read and grasp the sounds that are needed to form words in the English language. This is because sounds are required to spell words in the English language.

Acquiring the ability to communicate clearly via written language requires not just an understanding of morphology but also of syntax and semantics. Morphemes are the smallest meaningful components of a language that can stand on their own. The fundamental elements of each language are its morphemes. For example, the word "unbreakable" is made up of three separate morphemes: "un," "break," and "able," but the word "help" only has one morpheme in its structure. The structure of the morphemes in the word "unbreakable" includes both bound and free morphemes. It is stated that a morpheme is free if it is able to operate as a standalone word, while it is said that a morpheme is bound if it is unable to operate as a standalone word (for instance, un) (e.g., break and able).

In derivational morphology, morphemes are added to root words to create a new word, which is often of a new grammatical category (for example, combining *er* and *explore* to make *explorer*; or combining *re* and *develop* to make *redevelop*), whereas inflectional morphology can alter the form of a word to change its grammatical function. In derivational morphology, morphemes are added to root words to create a new word. Both derivational and inflectional morphology are within the category of morphology (e.g., changing *jump* to *jumping*). When we speak about morphological awareness, we are referring to the ability to comprehend and apply morphemes in an appropriate manner in order to change the meanings of words. This is what we mean when we say "morphological awareness" (Shu, 2005). There is a high probability that phonology and morphology will overlap in a vast number of different words. Verbs such as *talked*, *tuned*, and *swapped* all show that they are in the past tense since they conclude with the letter *-ed*, despite the fact that they are pronounced differently. This is the case regardless of how the words are pronounced at their ends. The morphological structures of these words are precisely the same, despite the fact that their pronunciations couldn't be more different.

Because children usually acquire phonological awareness before moving on to morphological awareness, it would appear that a child who has a phonological deficit may have impaired morphological development. This is because phonological awareness is typically acquired by children before they move on to morphological awareness. This is because phonological awareness is often the first aspect of language comprehension that a kid develops, followed by morphological awareness (Casalis, Cole, & Sopo, 2004). In spite of the fact that some research has been conducted on children's comprehension of morphology and the extent to which it is related to spelling, this area of research is relatively underdeveloped in comparison to the massive amount of work that has been done on children's understanding of phonology.

That is to say, studies have been carried out to assess not only whether or not morphological awareness is required for reading and spelling education, but also whether or not reading and spelling instruction helps to the development of morphological awareness in students. Verhoeven and Perfetti (2003) argue that this is the case due to the fact that there is a reciprocal relationship between learning to read and developing morphological awareness, particularly during reading instruction. Verhoeven and Perfetti (2003) argue that this is the case because there is a reciprocal relationship between learning to read and developing morphological awareness. According to Verhoeven and Perfetti (2003), this is the case because there is a reciprocal relationship between learning to read and developing Carlisle (2000) also states that students may benefit from having prior reading experience in order to acquire morphological awareness. Verhoeven and Perfetti (2003) say that this is

the case because there is a reciprocal relationship between learning to read and developing. According to the statistics, it would seem that children have generally acquired some morphological awareness by the time they have finished primary school; however, the precise moment at which this takes place is not known.

Therefore, it would appear that the middle to later years of primary school would be the optimum period to explore and try to boost children's morphological skills. This is because these are the years when children are most likely to be exposed to new material.

### **Material and Methods**

Research Methodology has been described as under,

### **Research Design**

The researcher in this study intended to check the role of morpheme-based instructions in language classroom for improving spelling proficiency. The research design employed for this study was experimental in nature. Two groups of ESL learners were designed to conduct this research. They were given as

- i- Control Group
- ii- Experimental Group

### **Variables**

Following were the variables of the research.

- Independent variables: Method of morpheme based instructions
- Dependent variables: Spelling learning
- Gender: Male and Female
- Area: Urban
- Sector: Public primary schools

### **Population**

The study was conducted in Tehseel Sadiqabad of District Rahim Yar Khan and Girls Primary Public Schools of rural and urban areas were the population for conducting research.

Age level of the students selected from these school was 10 to 12 years. It was made sure that all the students were of equal caliber. Their caliber was checked by their previous class's grades in the subject of English

City Name	Male Schools	Female Schools	Total Schools
Rahimyar Khan	11	9	20
Sadiqabad	8	7	15
Khanpur	8	7	15
Liaquatpur	8	7	15

### **Sampling**

It's not easy for the researcher to conduct the research in the whole primary schools of Tehseel sadiqabad of district Rahim Yar Khan. So, the population was sampled and reduced to one school of Tehsil Sadiqabad. One school was selected from urban area as researcher is teaching as a primary teacher in the selected school.

<b>Students</b>	<b>Male and Female</b>
Control Group	30
Experimental Group	30
Total	60

### **Sample Size**

Sample size for this study was one male public elementary school from Sadiqabad city. 60 students were selected randomly. 30 students were selected for experimental group and 30 students were placed in control group. They were all of equal caliber. Their caliber and mental level were assessed by 5th standard examination result card conducted by Punjab Examination Commission.

### **Research Technique**

This research was carried out by making two groups of 5th class. Research was based on two stages. First of all pre-test was conducted to check the present knowledge of the students. Then in first stage control group was treated through ordinary method of teaching for 8 weeks. After this, experimental group was treated through morpheme based instruction for improving spellings for 8 weeks. Both the groups were assessed by conducting post-test.

### **Participants of the Study**

Male and Female students of Primary level from public schools were participants of the study. Their age was from 12 to 14 years.

### **Tools of Data Collection**

Though this study was an experimental in nature so tests were adapted to collect the data.

### **Tests**

Pre-test and Post-test were adapted to check the difference between morphemes-based instructions to improve spellings of ESL students and the use of traditional method.

### **T- Test**

A T-Test is a method to check that whether methodology applied in the given samples of the study is significant or not? A T test actually a method of analyzing two populations means through the use of statically measurement or examination. A T Test is commonly conducted with small sample sizes for testing the difference between the samples when the variance of two normal distributions unknown. Thus, the process of T Test was applied to check the significant of the study.

## Research Procedure

In this research Controlled group was taught by traditional method through books and black/white board and experimental group was taught by morphemes-based teaching method to improve spelling proficiency. Pre- test helped to check present knowledge and Posttest helped to make difference of both teaching methods for both different groups. Duration of study was consisted of 8 weeks for both groups.

## Data Analysis Technique

Data were analyzed and interpreted by using mathematical formulas and different types of graphs.

## Validity of Instruments

Validity refers to the degree to which the instruments employed in the research measure the phenomenon that it is intended for those instruments to assess (Amin, 2005). The legitimacy of the instruments, i.e. was checked to make sure it was under the watchful eye of the helpful supervisor.

## Reliability

The degree to which the same groups of people can be swiftly measured using the same set of settings and yet get consistent results from the measuring tools is referred to as the reliability of the measurements (Amin, 2005). In order to guarantee the validity of the test, the Cronbach alpha method was selected as the appropriate methodology to use. Because of this, the instrument was efficient and helpful in determining the degree of motivational intensity and performance of primary school teachers in District Rahim Yar Khan with regard to English as a Second Language (ESL).

## Delimitations of the Study

This study was carried out in one Public School of Saidabad city and study was focused to improve spelling only spelling learning with the help of morpheme-based instructions.

## Results and Discussion

Data was analyzed by using SPSS V 23. Trough SPSS mean, SD p-value and t-value was find by the data obtained through pretest and posttest.

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

Test	N	M	SD	df	p-value	t-value
Pre-Test C	25	15.40	1.58	24	.138	.239
Pre-Test E	25	15.28	1.94			

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 was 25. The mean value of the pretest for the control group is 15.40 and the mean value of the pretest for the experimental group is 15.28. SD value for both the tests is 1.58 and 1.94 respectively. The value of d is 24, and the value of t is obtained as .239.



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

Test	N	M	SD	df	P-value	t-value	Effect Size
Post-Test C	25	25.72	1.64	24	0.00	-24.63	0.02
Post-Test E	25	42.96	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 25.72 and the mean value of the post-test for the experimental group is 42.96. 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 0.2. Since the p-value is 0.00 and effect size is 0.02 so the value of effect size 0.02 is less than 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 spelling proficiency skill is effective in ESL classrooms for teaching spelling at the primary level.

### Findings

These findings provide an additional step toward understanding the amount and nature of morphological awareness in improving spelling proficiency skill in children whose ages range from 8 to 10 years, as well as the significance of this talent to the development of children's spelling. Additionally, these findings shed light on the role that morphological awareness plays in the progression of children's spelling.

In addition, they contribute to the data foundation established by earlier studies regarding the consideration of techniques and the impacts of teaching young people about morphological structures in order to improve their spelling of English words. This foundation was established by earlier studies.

Because of the existence of a control group, it is feasible to arrive at the realization that any positive results are not only a sign of development throughout the course of time, but rather a response to the intervention that was carried out. The use of a direct measure of the application of morphemes, such as the spelling of pseudo words and development in this area, provides confidence in the learning of a concept by children as opposed to the acquisition of the individual spellings of words. This is because the use of a direct measure of the application of morphemes can be measured in a variety of ways.

The current study makes a significant contribution by investigating the effects of explicit instruction regarding the inflectional morphemes -s and -ed, looking at both the short-term and the long-term outcomes of such instruction. This investigation is a distinctive addition to the existing body of research. In addition to this, it prepares the way for a novel approach to the instruction of morphemes and grammar with the intention of improving spelling. The availability of this support enables teachers to get the assistance they need in the form of interactive narrative texts written by the researcher. This enables them to engage students in a group reading activity that is both mentally challenging and motivating. There had not been any therapies of this kind up to this time that were intended to make youngsters more aware of morphemes via the actual reading of text. This is due to the fact that the impact of morphological rules on spelling is often and unmistakably apparent all throughout the process of actually reading text. Some of the fundamental principles

that underpin the reading research that Solity and colleagues conducted can also be applied to the research that is conducted on spelling, as demonstrated by the fact that the intervention was carried out in classrooms, that it was led by teachers of the class, and that it made use of real books as its point of departure. In the end, the objective of this study was to conduct a more in-depth investigation of the relationship that exists between children's exposure to literature and their overall level of spelling ability. A reading experience scale was given to the participants in order to accomplish this goal. The participants' responses were then analyzed.

It is vital, however, that the findings be interpreted with caution because of a number of difficulties that are inherent in the methodological design and execution of the present study, as well as issues that have been highlighted by the results.

The first issue became apparent when it was recognized that the data from one half of the control group (and, thus, one half of the intervention group) needed to be eliminated during delayed post-testing. This revelation brought to light the first issue with the study. As a consequence of this development, the issue that arises from using treatment controls rather than real controls, who are those who do not get any intervention, was brought to light. If there had been a comparison performed between the intervention group and a control group that did not obtain any treatment (often referred to as a "waiting-list control group"), the design of the study would have been more robust, and ethical considerations would have still been taken into consideration. A design similar to that would have enabled better control of confounding variables and extraneous events; nevertheless, the time constraint that was placed on this study did not allow for its use.

It was not possible to collect any background information about the individuals' differences that made up the sample, which might be seen as yet another potential drawback of the research. At first, it was anticipated that the questionnaire about home learning settings might give some hints to trends within the present sample. Those clues would have been helpful. Naturally, this did not turn out to be the case as events transpired. However, the researcher noted that there wasn't much of a difference within this sample when it came to the number of students who got free lunches at school or who spoke English as a second language. This observation was made by the researcher. These are two elements that might be related with a person's socio-economic status and which, in turn, could have an influence on a person's literacy and language abilities. In other words, socio-economic status is a potential predictor of literacy and language skills. Therefore, even if the data from the questionnaire had been utilized in the end, it is probable that it would have only touched the variance in reading volume.

## **Discussion**

As a teacher of students who were considered to be English Language Learners (EL), the researcher observed that her students in the EL category had a lower level of spelling ability than their other peers. The study by the researcher showed how important it is for students studying English as a second language to have morphological awareness in order to obtain a better idea of how proficient they are at spelling. While conducting research on the benefits of morphology training, the researcher came across a morphology intervention known as Spellings Proficiency Excellence: Word Attack & Rate Development Strategies (REWARDS). He then adapted it so that it could be used as an intervention for English Language Learner (EL) students. It was thought that morphology, which is the process of

breaking down words into their constituent parts, would aid English Language Learners (EL) youngsters in decoding and understanding the meaning of new words on their own. The overall goal of this skill is to enhance the capacity of English Language Learners (ELs) to understand what they read. According to the results of the research, this intervention had a substantial impact not only on the students' ability to decode and properly spell words, but also on the students' understanding of the meanings of the words they were learning.

### **Conclusion**

It has not been shown that a quick intervention may boost awareness of two of the most frequent morphologically-based spelling rules among primary school students. This is a limitation of the study. There was some indication that these improvements may be applied to the spelling of actual words, although only a few of the pupils had strong quick boosts in their morphological awareness (only pseudo-words). The findings of the study might be seen as indication that the intervention has to be extended, made more intensive, and/or delivered more often in order to retain the integrity of the morphological information. The most likely causes for the observed pattern of results have been investigated, with a specific focus on the methodological restrictions imposed by the study as well as the flaws in the overall design of the intervention. Specifically,

the findings of the study provide new information about the development of implicit and explicit morphological awareness, and they verify previous theories suggesting that while children aged 6 to 8 years old are relatively decent at using morphemes imaginatively in spoken language, the majority of them are unable to make explicit distinctions in written language. The findings of the study provide new information about the development of implicit and explicit morphological awareness. According to one school of thinking, the only way to properly handle a substantial number of the most prominent issues provided by our existing technique of spelling is to make use of morphemes. This is because morphemes combine two or more letters into a single unit. It has been hypothesized that providing children with a systematic education that makes them explicitly aware of morphemes and the role they play in spelling could be a useful strategy for assisting children of all ability groups, including those who struggle with literacy and language, in the development of stronger and more accurate spelling abilities. Even though definitive conclusions cannot be drawn at this time, it has been hypothesized that this could be a useful strategy for helping children of all ability groups. It is likely that this will also foster a more general growth in language and literacy.

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