Affix Recognition Among University Students of English

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Abstract

Morphological awareness of affixes affects the learners' reading and foreign language vocabulary learning. The research is based on 30 samples from the Department of English, intended to examine the university students' competence in identifying and defining English affixes. The aim of the study was to discover the extent to which students were able to identify various kinds of English affixes, that is, prefixes, suffixes, and infixes, and also to investigate the variables that influence their ability to identify them. Data regarding students' response was gathered through a questionnaire to ascertain if they were familiar with the processes of affixation in the English language. After collecting the responses, patterns, challenges, and effectiveness of instructional strategies employed were examined. The research is novel as the research base has mostly focused on native speakers or overall morphological awareness. The research focused on positive recognition errors university foreign language learners make, a gap in the research base. Students reporting these widespread issues involve misidentification of affixes and superficial morphological processing, both of which reflect a clear deficit in the capacity to process morphological information. Refining instructional techniques was the emphasis. Finding new ways for students to build cues for vocabulary use beyond conventional methods, this study solves the affix identification required to build vocabulary proficiency.

تمكين اللواحق الاعرابية بين طلبة اللغة الإنكليزية الجامعيين

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الملخص	معلومات الارشفة

ان اللواحق الصرفية لها دور مميز على القراءة وتعلم مفردات اللغة الأجنبية. يستند البحث الى تحليل 30 عينة من قسم اللغة الانكليزية، ويهدف إلى معرفة كفاءة طلاب الجامعة في تحديد وتعريف هذه اللواحق وذلك لغرض بيان مدى قدرتهم على تحديد أنواع مختلفة من اللواحق الصرفية الإنكليزية، مثل البادئات واللواحق واللاحقات التي تستخدم في سياقات مختلفة.لذا فانه تم جمع أجوبة لاستبانات موزعة بين الطلبة في قسم اللغة الإنكليزية وتم تحليلها بالطريقة الإحصائية. كما وركز البحث على الأخطاء الاملائية والكتابية التي يستخدمها هذه الطلبة اثناء كتاباتهم وبيان أسبابها والتي هي ضمن المحور الأساسي للدراسة الحالية. وعلى ضوء ما سبق فانه تم ذكر أسباب ومعالجات لمثل هذه الظواهر كالتركيز عليها وإعطاء دروس مكثفة تتعلق باللواحق وكيفية استخدامها وفق الطرق العلمية الحديثة. وتوصلت الدراسة الى نتائج وتوصيات للبحوث المستقبلية.

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1. Introduction

The ability to recognize affixes, one of the abilities of Morphological awareness, is crucial to one's command of a language and facilitates the acquisition of a second/foreign language. Affixation, such as prefixes, suffixes, and infixes assist in creating new words and their meanings. The two processes are therefore crucial for vocabulary acquisition and reading ability. In EFL contexts, students tend to have difficulties with affix identification because of insufficient exposure, ineffective instructional practices, or interference from their mother language. A great deal has been published on Morphological awareness, yet the majority of research is on first language speakers and overall morphology instead of being specifically focused on certain concerns about EFL learners of affix identification. This research aims to bridge this gap by examining the ability of students enrolled in the English Department at the university of Al-Hamdaniya to identify and define English affixes. The research employs a sample of thirty students and a questionnaire as the primary data-gathering instrument. It also aims to identify the difficulties experienced by the students, establish the sufficiency of instruction on affix recognition skills, and suggest methods of teaching affix recognition skills. This study attempts to answer the following questions: (i) how are the students identify the affixes? (ii) What are the gaps or difficulties that the students face?

2. Literature Review

Several studies have indicated that the university students of English frequently display varied degrees of performance in regarding with affix recognition and affix usage. These students usually will have some knowledge of common prefixes and suffixes, but their performance in unfamiliar affixed words or in the contextual application of morphological knowledge is quite inconsistent. Such inconsistency may be the result of inadequate explicit instruction in word formation plus too much reliance on mere memorization instead of using analytical strategies. The general bearings from these experiments seem to indicate and provide some evidence that, while university students have a bearable basic knowledge of the affixation process, they sorely lack the deeper morphological awareness of when and how to utilize the knowledge in real life. As many studies were conducted concerning the performance of university students with respect to their grammatical and morphological knowledge, Salman and Hazem (2022) found that if students have better grammatical knowledge, then their performance on the writing tasks is more likely to be better.

Although this study has talked about grammar in general, hence the authors consider morphology recognition to be among the sub-skills that are very important for grammatical accuracy and vocabulary development. These findings suggested that, for general language proficiency at the university level, there should be a strong emphasis on structural language knowledge, including the recognition and appropriate use of affixes.

In a parallel attempt, Kamil and Hazem (2020) investigated the interference from the first language on students' use of English grammar. While their study primarily focused on prepositions, it emphasized the broader influence of native language on the acquisition of English grammar, including morphological components such as affixation. These studies suggest that both grammatical awareness and cross-linguistic influence significantly shape students' English language performance. Additionally, Hazem (2017) identified specific challenges students face in using quantifiers correctly in English and proposed strategies for addressing these challenges. Although this study focused on a different aspect of grammar, it highlights a broader issue in mastering grammatical elements, including morphological features like affixes, and underscores the need for more targeted instruction in these areas. Most recently, Kanaan, Hazem, and Kamil (2022) explored strategies for improving grammar instruction in Iraqi universities, emphasizing the importance of contextualized learning. Similarly, Hazem (2015) examined the students' performance regarding the resumptive pronouns to measure their ability and written performance while using such syntactic phenomenon. His study concludes with some suggestions and recommendations for future study for EFL students. However, as far as morphological awareness of affix is concerned, it has been stated that such a study plays a crucial role in enhancing EFL students' vocabulary and word recognition, for instance, Carlisle (2000) points out that the relations between awareness of morphology and reading comprehension result the enrichment of vocabulary. Furthermore, such relations extend beyond phonology as well, e,g,, drama—dramatical (Nagy et al., 2006) and also have a vital role in the acquisition of affix for foreign students of English language. In the same vein, Kieffer and Lesaux (2008) examined the impact of derivational morphology on reading comprehension among Spanish speakers who learn English. Those students face difficulty in distinguishing between the morpheme 'revision' (re+vision), which means "act of review" from the morpheme 'revise' (re+vise) which means "to change". The study highlighted that focusing on affixes during teaching results in an increase of vocabulary (cf. Tyler and Nagy,1989).

Also, students showed a tendency to confuse affixes with similar structures, as in the case of -able and --ible (as used in comfortable or responsible). Such an observation aligns with the current research aim of determining the specific challenges that university students face in identifying affixes. In addition, Mahony et al. (2000) examined the interconnection between reading ability and the extent of morphological awareness. They investigated that the students with rich morphological variations have grater marks and scores during their vocabulary test. For instance, the students who can analyse and break down the word 'enlargement' (en- + large +-ment) into morphemic parts, they are capable to understand the meaning of words and also at sentence level. This quantity of research assists the importance of affix identification as a major factor for academic success in learning foreign language. However, whereas previous research has mostly focused on native speakers or general morphological awareness, the current research seeks to fill a gap by targeting the challenges and levels of proficiency encountered by university students of English as a Foreign Language. Through an assessment of students' abilities to identify and analyse affixes, the current study hopes to contribute significantly to the field of applied linguistics by suggesting viable instructional strategies for developing morphological awareness among EFL students.

2.1 Transition to Current Work

While the previous studies provide valuable insights into understanding affix recognition as well as morphological awareness, there is a significant gap wi/thin academic literature as regards the particular issues faced by university-level learners of English as a Foreign Language (EFL) with both the recognition as well as interpretation of affixes. While a significant number of previous studies have focused on native speakers or have addressed morphological awareness generally without specifically targeting the unique issues faced by non-native speakers—more particularly, university-level students of the EFL in recognizing affixes, the majority of these studies have focused mostly on primary as well as secondary educational contexts, leading to a dearth of research regarding the higher education context. This research intends to bridge the gap by investigating the affix recognition abilities of 30 students of the Department of English. Applying a questionnaire designed for assessing the students' proficiency level for recognizing as well as interpreting a set of affixes (prefixes, suffixes, as well as infixes), the research hopes to provide a more detailed understanding of the unique issues of university-level EFL learners. Following a thorough examination of data, the current research will evaluate the

students' proficiency for affixed word identification as well as identify frequent mistakes they commit while trying to break down complex vocabulary into its morphemic parts. Through this, the study wishes to be able to aid in the research efforts currently being made by illuminating the nature of the process that enables affix recognition through direct teaching. What is so impressive about the investigation is its highly concentrated nature as it deals with the sphere of higher education and particularly students of the university whose sense of word structure can be developed through explicit instruction about the role of the affix. In finding the deficiencies of prior work, the present study not only broadens the spectrum of teaching methods but also provides a more profound insight into morphological awareness in the foreign language acquisition context.

3. Methodology

This is a description of the research design, participants, data collection tools, and data analysis methods used in the study of the identification of affix recognition among university students in the Department of English. To achieve the objectives of the study, a quantitative research design is used with a descriptive approach to examine students' capability of identifying and interpreting English affixes. This research is conducted using a cross-sectional survey where a group of participants are examined at a single point in time by a questionnaire. This will help in examining students' morphological awareness, especially their ability to recognize affixes. The participants in this research are 30 students who were studying in the Department of English at the University of Al-Hamdaniya. The participants are chosen using convenience sampling, which is done based on the availability and willingness of participants (20 words). The participants are all non-native speakers of English, who have different levels of English proficiency, and are studying English as a foreign Language. The age group of the participants is in the range between 19 and 24 years. All the participants have given their informed consent to participate in this study. The data were collected through a questionnaire that was designed to test students' ability to recognize and interpret affixes in the English Language. The designed questionnaire consists of two sections:

Section 1: Affix Recognition Task

In this section, the participants have been presented with ten words, and their task is to identify if the affix is a suffix, prefix, or both.

Section 2: Parts of Speech Recognition Task:

Participants receive a complete set of 10 words with different parts of speech and their task is to mark the appropriate part of speech for each given word.

4. Data Analysis and Findings

This study examined university students' ability to recognize affixes and identify the corresponding parts of speech. A total of **30 students** from the Department of English at Al-Hamdaniya University participated in the questionnaire, which consisted of two tasks:

1. Identifying the affix in a given word.
2. Identifying the part of speech of the word.

The responses were analyzed for accuracy, common errors, and trends in affix recognition and part-of-speech identification.

4.1 Accuracy in Affix Recognition

The results revealed that **33%** of students correctly identified affixes across all words. The accuracy rates varied based on the type of affix.

The findings suggest that students were more successful in recognizing **prefixes** than **suffixes**, in that **23%** of the students successfully recognize the prefixes while only **10%** recognize the suffixes in the given words.

4.1.1 Accuracy in suffix Recognition

The students vary in their recognition of the suffixes ,certain suffixes were easy to recognize while some of them are not recognized well by the students. The table presented below shows the percentage breakdown of the recognition of each suffix:

Table (1): suffix Recognition

suffix	per
-ing	93%
-ness	86%
-ful	86%
-ment	80%
-s	50%
-ure	36%
-al	30%

As it is shown that the suffixes (-ing , -ness, -ment, -ful) almost take the highest percentages indicating that the majority of the students recognize these bound morphemes as suffixes, not prefixes. On the other hand, 50 % of the students identify the suffix -s that is inflected in the word "misunderstandings" for the purpose of pluralization. It seems that it was challenging for the students to recognize the suffixes -ure and -al successfully as it is observed in the table above they have the lower percentages in that 36% are aware that -ure is a suffix while 30% only realize that -al is a suffix. This misidentification is accounting for low morphological awareness of suffix recognition among university students, they don't have a sufficient morphological knowledge that enable them to recognize and identify different suffixes easily. The limited and restricted information of the students related affixes recognition leads them to face a kind of difficulty in identifying the suffixes that are inflected in the given words, particularly the suffixes (-ure and -al). This may indicate that the students are not quite familiar with such suffixes unlike other suffixes, that's why the resalts and the percentages presented in the table above show this variation.

4.1.2 Accuracy in Prefix Recognition

As it is mentioned previously, students can recognize prefixes more than suffixes. The table presented below shows the percentages of the identification of each prefix:

Table (2): Prefix Recognition

prefix	per
un	93%
dis	86%
infra	86%
mis	80%
im	76%
en	60%

As the table shows, the prefix represented by "un" has been recognized correctly by 93% of the students indicating that they are familiar with such a morpheme to be placed as a prefix initially in the words to express the oppositeness. The prefixes (dis and infra) are identified correctly as prefixes by 86% of the students which may indicate their well recognition of such prefixes. Also the prefix "mis" which has been recognized by 80% of the students, such a percentage refers that the students are aware enough to identify the morpheme "mis" as a prefix added to verbs and their derivates

holding the meaning of inconsistency. The accuracy of prefix recognition has been gone down with being compared to other prefixes by the identification of the prefix "im" that is added to adjectives to give the meaning of opposition, in that only 76% of the students recognize it well. Finally , the students performance to recognize the prefixes has been apparently decreased when they almost fail to recognize the prefix "en", in that only 60% of the students recognize accurately that such a morpheme is a prefix added to certain adjectives converting them to verbs.

   As a whole and To sum up, the contents of the two tables presented above prove that the accuracy of prefix recognition is superior to that of suffix recognition.

4.2 Accuracy in Part-of-Speech Identification

In the second task, students were asked to determine the part of speech of the given words. The overall accuracy rate was **26%**, with the following breakdown:
- **Nouns**: **10%** correct responses
- **Verbs**: **6%** correct responses
- **Adjectives**: **3%** correct responses
- **Adverbs**: **6%** correct responses

   Out of 30, three participants identify the words (Darkness,agreement,happiness) correctly as a noun.While two participants only make a correct identification to the words (activate, enlarge).Moreover, the words (dangerous , boring) have been identified correctly by only one of the targeted participants.As far the identification of adverbs is concerned, two participants recognize that the words (quickly , honestly) are adverbs.

Errors in part-of-speech identification were more frequent in words where affixation caused a shift in category. For example, students struggled with the word (quickly) in that **60%** of the students identify it as an adjective. Another error can be observed through identifying the word (boring). It was somehow challenging for the students to recognize correctly the part of speech of this word in that **40%** of the participants identify it as a verb while **43%** of them identify it as an adjective. The two mentioned rates are too close to each other and this is a reflection of student's confusion related to identifying the appropriate part of speech of the word (boring). As it is known, verbs are inflected by **-ing** to express the progressive mood particularly, if they are preceded by auxiliary verbs. In addition , verbs also can be inflected by **-ing** to form adjectives like boring, interesting , amazing, etc, that's why , such a number of students fail to identify the word (boring) correctly.

4.3 Trends and Observations

A comparison of affix recognition and part-of-speech identification revealed:

- Students who correctly identified affixes tended to perform better in part-of-speech recognition.
- Suffixes were more challenging than prefixes, especially those with abstract functions (e.g., -al and -ure)
- Some students relied on semantic cues rather than morphological structure to determine word class, leading to errors.

These findings indicate a need for greater emphasis on morphological awareness in English language instruction, particularly in understanding how affixation influences both meaning and grammatical function.

4.4 Discussion

The findings of this study emphasize the major gaps related to affix recognition and part of speech tagging by students in a university setting. Some of these explanations might involve the complexity of the language, the background education, and the mental processes involved, these are:

1. A Transparent Morphological System Versus Complexity

One explanation for why students struggle with some form boundaries is the differing ratios of morphological tracking to morphological structures. Prefixes un- and im- were more effortlessly recognized because they are commonly used and vastly understood in many cross-linguistic forms. Conversely, -ure and -al which are classified as later understanding derivational suffixes, tend to be more difficult to recognize due to their more intricate nature.

2. The Contribution of Inflectional vs. Derivational Affixes

The suggestive inferential reasoning behind lower accuracy tend to identification of derivational affixes denotes that students face difficulties solving word building stems without gramatical modifications. Understanding the relationship between the word's parts of speech is imperative as derivation suffixes alters the class of the word morpholoigically-semantic construction. In this instance, inflectional affixes such as -s, -ing are middle easier forms of recognition not because of fixed meaning of the word but because they do not change the essence of the word.

3. Wrong Assignment of Words in Parts of Speech Tables

It has also become clear from thse findings that students did not fully manage to process affixations causing them changes in the category to which words were most probably assigned, foe example the word 'quickly' misidentified as an adjective. This suggests that many students rely more on semantic cues than on morphological structure when identifying word classes.

5. Pedagogical Implications

These findings emphasize the need for **explicit instruction** in morphological analysis, particularly:
- Teaching students **strategies for breaking words into morphemes** rather than relying on memorization.
- Providing exercises that contrast **derivational and inflectional affixes** to strengthen students' recognition skills.
- Emphasizing how affixation affects both **meaning and grammatical category** to improve part-of-speech identification.
- Rather than isolating affixes, instruction should focus on **teaching affixes in meaningful contexts**

The results indicate that university students exhibit **varying levels of affix recognition and part-of-speech identification**, influenced by morphological complexity, cognitive processing models, and word frequency effects. These findings highlight the importance of **explicit morphological instruction, context-based learning, and contrastive analysis** to improve students' understanding of affixation in English.

6. Limitations

The current study is limited to the performance of a questionnaire given to the students of the department of English to measure their recognition of English affix.

7. Conclusion

According to data analysis, it has been concluded that the majority of the students can only identify and differentiate the affixes and the parts of speech that they are familiar with. Their performance is likely to be better when being exposed to certain words that they are know before and use them more than one times, while exposing to new words

having specific suffixes and prefixes weaken their ability to distinguish the affixes of these words well. As far as the identification of parts of speech is concerned, the majority of the participants can identify the parts of speech well, but they differ in distinguishing each part a lone. Implication from the results is that there should be incorporation of particular exercises focused on affixation by EFL programs, including word formation activities, morphological analysis tasks, as well as vocabulary development approaches focused on affix-based word families. Second, the research is poised to contribute importantly to applied linguistics as a discipline by addressing a research gap regarding affix identification for university students learning a foreign language. Results will provide a richer understanding of the specific challenges of learning affixes for EFL students at the tertiary level, hence helping to improve existing models of morphological awareness. Additionally, the pedagogical recommendations derived from the research are poised to have implications for theoretical models as well as practical approaches towards enhancing morphological awareness for higher learning

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Appendix

In this section, additional materials that support the study are provided. These include the questionnaire used to assess affix recognition abilities, as well as any other supplementary data or explanations referenced throughout the study:

Dear Students,

We hope you are very well. We are the researchers in the Department of English at the University of Al-Hamdaniya. We are conducting a study on affix recognition in the English language among university students, and we would like to get your feedback throughout the quick questionnaire presented below. The purpose of this questionnaire is to understand how students of the English language recognise different affixes in words, which can help improve language learning techniques. Your answers will be of great value and will remain anonymous, and it will only take about 20 minutes to complete. Thank you so much for your help!

Q1 Identify the affix (prefix or suffix) in each word:

No.	Words	Prefix	Suffix
1.	**Unhappiness**		
2.	**Disapproval**		
3.	**Encouragement**		
4.	**Infrastructure**		
5.	**Misunderstandings**		
6.	**Beautiful**		
7.	**Impossible**		
8.	**Kindness**		
9.	**Playing**		
10.	**Children**		

Q2. **Identify the correct part of speech of the following words based on their affixes:**

No	Words	Parts of speech			
		Noun	**Verb**	**Adjective**	**Adverb**
1.	**Darkness**				
2.	**Quickly**				
3.	**Agreement**				
4.	**Activate**				
5.	**Happiness**				
6.	**Enlarge**				
7.	**Boring**				
8.	**Active**				
9.	**Dangerous**				
10.	**Honestly**				