



## Challenges in Pronouncing English Inflectional Morphemes among Students at the Faculty of Education in Ghat, Libya: A Study on -ed and -s Pronunciation

Sumaya Ramadan Aoghala\*

English Language Department, Faculty of Education-Ghat, University of Sebha,  
Ghat, Libya

التحديات في نطق اللواحق الصرفية الإنجليزية لدى طلبة كلية التربية بغات، ليبيا:  
دراسة حول نطق اللواحق -ed و-s

سمية رمضان أوغلة\*

قسم اللغة الإنجليزية، كلية التربية، غات، جامعة سبها، غات، ليبيا

\*Corresponding author: [sum.aoghala@sebhau.edu.ly](mailto:sum.aoghala@sebhau.edu.ly)

Received: July 14, 2025

Accepted: August 30, 2025

Published: September 06, 2024

### Abstract:

This study investigates the pronunciation of English inflectional morphemes by students studying the English language in the Faculty of Education, Ghat, Libya. The study focused on pronouncing -ed in regular past simple, -s in third person singular present tense, and -s in regular plurals. The study attempted to identify common patterns and challenges among these students. Data were collected from a phonetic analysis of 15 English language students during a recorded pronunciation test. The test consists of three categories. Each category represents one morpheme (-ed past simple, -s present tense, and -s regular plurals), and there are 18 words, with an equal number of words representing the three variations in each category. Analysis revealed that students of the English language at the Faculty of Education in Ghat struggle with pronouncing the inflectional morpheme "-ed" in regular past tense verbs, compared to "-s" in plurals and third-person singular present verbs. They have good phonological awareness about the suffix "s" pronunciation rules but often pronounce "-ed" incorrectly due to confusion in grapheme-phoneme correspondence and insertion of /ɪ/ before /d/, which also causes inaccuracy in pronouncing the -s morpheme.

**Keywords:** allomorphs, inflectional morphemes, past simple, plurals, present tense, pronunciation.

### الملخص

تتناول هذه الدراسة صعوبات نطق اللواحق الصرفية في اللغة الإنجليزية لدى طلبة قسم اللغة الإنجليزية في كلية التربية بمدينة غات، ليبيا. وتركز الدراسة على نطق لاحقة -ed في الماضي البسيط للأفعال المنتظمة، ولاحقة -s في زمن المضارع البسيط مع الفاعل المفرد الغائب، وكذلك -s في صيغة الجمع المنتظم. تهدف الدراسة إلى تحديد الأنماط والتحديات الشائعة لدى هؤلاء الطلبة. وقد تم جمع البيانات من خلال تحليل صوتي لخمس عشرة طالبًا وطالبة خلال اختبار نطق مسجل. يتكون الاختبار من ثلاث فئات، تمثل كل فئة لاحقة صرفية واحدة (-ed في الماضي، -s في المضارع، و-s في الجمع)، ويضم كل قسم 18 كلمة، تتوزع الكلمات فيها بالتساوي بين الأنواع الثلاثة المختلفة لكل لاحقة. أظهرت نتائج التحليل أن طلبة قسم اللغة الإنجليزية في كلية التربية بغات يواجهون صعوبات في نطق لاحقة -ed في الأفعال المنتظمة بصيغة الماضي، مقارنة بلاحقة -s في صيغتي الجمع والمضارع المفرد الغائب. وبينت الدراسة أن الطلبة لديهم وعيًا صوتيًا جيدًا بقواعد نطق لاحقة -s، إلا أنهم كثيرًا ما يخطئون في نطق -ed نتيجة الالتباس في العلاقة بين الحرف والصوت (الجرايم والفونيم)، وإضافة صوت /ɪ/ قبل /d/، مما سبب أيضًا في أخطاء في نطق المورفيم -s.

## Introduction

In second language acquisition, mastering both morphological structures and their correct pronunciation presents a significant challenge for learners. According to William (2020), English pronunciation is challenging for non-native speakers due to its lack of phonemic orthographic conventions. Other languages like Italian, Turkish, and Spanish have more consistent orthographic systems. Adults learning a second language often focus on grammar and punctuation rules, leaving spelling and pronunciation rules behind. This may be due to the unreliable phonemic orthography in English, which is not very reliable in rule formation.

Therefore, many foreign learners put English grammar at first priority when learning English, and some even ignore the pronunciation rules. The pronunciation of the English past tense morpheme -d, which has three allomorphs: /t/, /d/, and /ɪd/, and the third-person singular present tense as well as the regular plural -s, which has three allomorphs: /s/, /z/, and /ɪz/, are sometimes a source of confusion. Although native speakers use these forms naturally, many non-native speakers fail to discern and produce them appropriately, resulting in diminished intelligibility in spoken communication. This problem is especially prevalent among learners whose first languages do not share similar morphological or phonological processes.

This study examines the pronunciation patterns and challenges encountered by learners about the inflectional morphemes -d and -s in English. Using data from a phonetic analysis of a pronunciation test, the study attempts to identify students' pronunciation of inflectional morphemes. In addition, identify the phonetic representation of students' mispronounced words. The paper is structured as follows: Section 1 examines relevant literature on English morphology (inflectional morphemes -s and -ed), Section 2 describes the research methods, Section 3 gives the findings, Section 4 discusses the results and the implications for language instruction, and finally, the conclusion.

## Literature Review

### What are inflectional morphemes?

A morpheme is defined as a language's smallest meaningful unit (Abker, 2020; Nandito, 2016). Yule (2010, p. 67) added that a morpheme is 'a minimal unit of meaning or grammatical function.' Additionally, English words are composed of morphemes. There are two types of morphemes in English: free and bound morphemes. The free morphemes are those that can stand on their own as single words. So, they can be words, such as pen, dog, and house, while bound morphemes, such as -er and -s, cannot stand alone as words, and they must connect to free morphemes. So all English affixes are bound morphemes (Abker, 2020; Nandito, 2016; Yule, 2010).

There are two subtypes of bound morphemes: derivational and inflectional morphemes. Derivational morphemes are those that alter a word's meaning or part of speech (i.e., they are morphemes that allow us to "derive" a new word). They can be both suffixes and prefixes. An example of a derivational morpheme is un-, which adds a negative meaning to the word it is added to (Alic: Analyzing Language in Context, n.d.).

However, inflectional morphology is the morphology related to syntax (Bauer, 2004). Grammatically, inflection refers to modifying a word to indicate several grammatical categories such as tense, case, voice, aspect, person, number, gender, and mood (Rao, 2018). Accordingly, inflectional morphemes add grammatical information to the word, such as -s in runs, which indicates that it is a third-person singular present tense verb, or -s in boys, which indicates that there are several boys. (Alic: Analyzing Language in Context, n.d.)

Yet, inflectional morphemes do not create new meaning, nor do they change the syntactic category of the words or morphemes to which they are attached (Bauer, 1988, as cited in Abker, 2020). Additionally, inflectional morphemes are always the final morphemes of a word. They are always suffixes. And only a single inflectional morpheme can be added to a word. They play a crucial role in producing and comprehending grammatical and structural elements of speech (Ismail, 2016).

In English, there are eight inflectional suffixes, often known as "inflections."

Verb endings: -s (third person), -ed (past tense), -ing (progressive), -en (past participle), -s (plural), -'s (possessive), -er (comparative), -est (superlative). (Alic: Analyzing Language in Context, n.d.).

### Inflectional Morphemes and Pronunciation problems:

Phonologically, the morphemes -s/-es and -ed each have three different forms or morphs (Bui and Nguyen, 2022). Each of these several forms is classified as an allomorph, which is a distinct form of the same morpheme that is employed in different contexts or places (StudySmarter, 2024).

### The pronunciation of —d/ed in the regular past tense:

"To express the past using the past simple tense, i.e., an action that took place in the past, the ending -ed, or less commonly, -d, is added to the base verb in all singular and plurals" (Wilk, 2022, p. 15). The English regular past tense has a straightforward morphology, but learning the morpheme -ed

is made more difficult by the fact that it contains three allomorphs. The morpheme "-ed" is pronounced /t/ in words like "worked" and "looked," /d/ in words like "listened" and "moved," but /əd/ or /ɪd/ in words like "wanted" and "succeeded" (Davila, 2018).

Phonological criteria determine these three allomorphs of the inflectional morpheme -ed. The sound at the end of the main verb's infinitive and whether it is voiced or not determine how the -ed inflectional morpheme is pronounced (BBC Learning English, n.d.). In particular, if the infinitive ends in a voiceless consonant other than /t/, such as /k/ and /p/, the -ed inflectional morpheme is pronounced /t/. While -ed is pronounced /d/ if the last sound in an infinitive is any voiced sound other than /d/, including vowels. Finally, when the root verb ends in /t/ and /d/, -ed is pronounced as /əd/ or /ɪd/ (Davila, 2018, Rao, 2018).

### **The pronunciation of -S in regular plurals and third-person singular verbs.**

In grammar, regular plural nouns are made by adding an "s" or "es" to the end of the singular form to change it to plural. Moreover, in simple present tense, verbs use "s" or "es" suffixes at the end of the base form to indicate their relationship with the subject (third singular person) (Faisal, 2023).

Yet, both plural nouns and third-person singular verbs in simple present tense go through phonological processes that appear to be challenging, especially for foreign learners. That is, the (s) in plural nouns such as 'dogs' and 'cats' is not pronounced the same way and does not make one sound, and the (s) in a plural word like 'dishes' has an extra vowel (e) before it (Faisal, 2023). This is the same issue with the pronunciation of the (s) in third-person singular verbs in simple present tense, such as 'speaks,' 'reads,' and 'watches.' Each -s has different phonological forms.

The different forms of -s are called allomorphs, as discussed earlier. Both English plural nouns and third-person singular verbs in the present tense have three allomorphs, pronounced /s/, /z/, or /ɪz/-/əz/ - /əz/ (Faisal, 2023; Abker, 2020; Rao, 2018).

The pronunciation of the final -S in plural nouns and third-person singular verbs is determined by the preceding final consonant sound (Abker, 2020; Rao, 2018).

- -S morpheme is pronounced /s/ if the last consonant of the word is voiceless (p, t, k, f, θ).
- -S morpheme is pronounced /-z/ after voiced sounds /b, d, g, v, ð, m, n, ŋ, l, r, y/ and all vowel sounds.
- -S morpheme is pronounced /ɪz/ if the last consonant sound of the word is a sibilant sound /s, z, ʃ, ʒ, tʃ, dʒ/.

### **Studies in pronunciation problems in –s and –ed inflectional morphemes:**

A number of studies were conducted to investigate the pronunciation problems of foreign learners of English. Research by Hamdeen et al. (2024) sought to determine the difficulties Socotri English as a foreign language learners encounter while pronouncing the suffixes /d/ and /s/. This investigation's design was quantitative. The test was administered to 24 English language learners at two different levels, from first to second university level, at the English department, College of Education, Humanities, and Applied Sciences, in Socotra. The results of the study showed that the learners' pronunciation of words with suffixes added was at an acceptable level. The findings, however, indicated that pronunciation is a challenge for Socotri learners in particular when it comes to the suffix /d/ rather than /s/. However, neither the students' gender nor their academic level was found to be significantly associated with the pronunciation of the [s] and [d] in Socotri students' speech.

Aoghalu and Ali (2024) conducted research to evaluate pronunciation challenges experienced by foreign language learners in Ghat, southwest Libya. This study utilised qualitative research methods and two data-gathering tools: observation and pronunciation tests. The study was conducted at three Ghat secondary schools, with 25 students in each class aged 15 to 17. In terms of inflectional morphemes, data from a pronunciation exam, reading-aloud session activity and direct observation show that students make mistakes when pronouncing inflectional morphemes. Some learners form regular plural nouns by pronouncing the /s/ sound at the end of plural nouns, even if the phonemes before it are voiced. Additionally, most students place the /ɪ/ sound before the /s/ or /z/ sound in regular plural nouns and before the /d/ sound in regular past verbs, despite the voicing case of the preceding phonemes.

A significant study conducted by Bui and Nguyen (2022) aimed to investigate how high school students' phonological awareness affects their ability to pronounce allomorphs of English inflectional morphemes -ed and -s. The study took a descriptive method, analysing quantitative data from a paper exam (PWT) and an oral test (POT). The research included thirty-one Grade 11 students from a high school in the Mekong Delta of Vietnam. Their ages varied from sixteen to seventeen. All of the learners had been studying English for seven to 10 years at the time the research was done. To measure participants' phonological awareness, the study administered both a pronunciation written test (PWT) and a pronunciation oral test (POT).

The PWT was created using the National High School Graduation Exam (NHSGE) format and consisted of multiple-choice questions with four choices. It comprised 20 questions about -s and -ed sounds in target words, picked from a previous lesson to ensure familiarity. The Pronunciation Oral Test (POT) is a two-part test that evaluates students' pronunciation skills. Part I consists of reading 20 target words and phrases aloud, while Part II consists of writing and reading sentences using the same words. Part I tries to identify mispronounced sounds, whereas Part II assesses students' ability to compose sentences. The examination focuses on creating phrases with good grammar and content while also assessing their pronunciation. The examination emphasised students' sentence pronunciation over good grammar and content, with the goal of capturing attention rather than assessing sentence grammar. The study discovered that, while most students had sufficient English speech abilities, their knowledge and performance differed greatly. The students' pronunciation performance did not match their pronunciation knowledge, and there was no association between the two. This indicates a considerable disparity in students' knowledge and ability in pronouncing allomorphs of the English inflectional morphemes -s and -ed.

Moreover, a study conducted by Mohamedahmed (2021) attempted to detect and address pronunciation issues with -ed endings among university students in English. The study included both qualitative and descriptive methodologies. The study's sample comprises 20 male university students who major in English as a foreign language in Saudi Arabia at the College of Sciences and Arts, Turaif, Northern Border University. The participants were instructed to perform a stem-inflectional task by listening to 15 normal past tense verbs ending with inflectional 'ed.' The task randomly assigns 15 verbs to three allomorphs of the inflectional morpheme 'ed.' The first five verbs represent the 't' sound, the second five represent the 'd' sound, and the last five represent the 'ɪd' sound. The participants' responses are recorded and assessed qualitatively. The study found that many university students struggle with pronunciation, particularly with -ed morpheme endings. They incorrectly believe that all regular past tense verbs ending in 'ed' are pronounced as 'd'.

Abker's (2020) study examined Saudi EFL students' pronunciation issues with English morphemes. Data for this study was obtained from 25 Saudi students whose main area of study is the English language at the English Department, Faculty of Sciences and Arts in Almandag. Data was collected by orally recorded tests. In this test, the students were asked to read aloud some different target words written on sheets (plural nouns, present simple verbs, and regular past verbs). The study used a descriptive statistical method. The SPSS software was used to examine the data. The study revealed that Saudi students faced problems in showing the correct pronunciation of English morphemes of nouns and verbs in present and past tense correctly. Students struggled to discern which morpheme was accurate. The researcher claims that there is a lack of practice, and the students disregarded the general guidelines for employing English morphemes.

Muna (2016) performed a case study on the pronunciation of third-singular present verbs with an s/es ending among Thai and Indonesian undergraduate students at Institut Agama Islam Negeri IAIN Salatiga (IAIN Salatiga). The primary goal of the study was to compare and contrast how Thai and Indonesian students pronounce third-person singular present verbs and plural nouns. Interviews and documentation were used to gather data. All of the participants were requested to read a list of words that includes 30 plural nouns, 30 present verbs, and a paragraph with the suffix s/es at the end of each word. The interview was conducted using questions that had been prepared by the writer. After collecting data, the researcher evaluated and compared the differences and similarities between Thai and Indonesian undergraduates in pronouncing plural nouns and third-person singular present verbs as a result of gradual assimilation. The study indicated that both Thai and Indonesian students pronounce numerous words (third singular verbs and plural nouns) by substituting the [s/z] sound for /əs/. Also, Thai and Indonesian students prefer to add the /ə/ sound before the /s/ or /z/ sound due to the difficulty of pronouncing suffix consonant clusters.

## **Methodology**

### **Research Design**

This study adopted a quantitative descriptive research approach. This research approach is designed to provide a detailed and systematic description of features and attributes of a population or phenomenon. (Insights opinion, 2025). It comprises the systematic collection and analysis of numerical data to delineate and summarise the attributes of a population or phenomenon (Unimrkt, 2023).

This method is used to examine how English students pronounce the inflectional morphemes "-ed" in regular past tense verbs and "-s" in regular plurals and third-person singular verbs. The emphasis was on identifying typical patterns of mispronunciation and determining how well students applied the phonological principles that regulate the pronunciation of these morphemes.

## Participants

The study involved 15 students from the fifth, sixth, and seventh terms enrolled in an English language course at the Faculty of Education in Ghat, Libya. The students were chosen from these grades to make sure they all had a similar understanding of English and had already learnt about past tense forms, plurals, and third-person singular tense forms, since these topics are taught in the earlier semesters as part of the basic curriculum.

## Data Collection Procedures

The results were gathered using a pronunciation test separated into three categories. The first category is a list of 18 regular past-tense verbs with different final sounds. The list was created to elicit the three phonological variations of the -ed morpheme [t/d/id]:

walked	arrived	wanted
jumped	failed	started
liked	smiled	carried
passed	enjoyed	shouted
stopped	Played	visited
crossed	killed	added

The second category consists of 18 ordinary third-person singular verbs with varied ending sounds. The list was compiled to elicit the three phonological variants of the -s morpheme [s/z/iz].

walks	plays	fixes
talks	wears	relaxes
likes	Sings	watches
sits	does	changes
eats	lives	washes
stops	says	misses

The final category comprises 18 regular plurals with varying final sounds. The three phonological variations of the -s morpheme were intended to be elicited by the list.

cats	dogs	buses
books	jobs	houses
clocks	cars	classes
months	boys	watches
students	apples	boxes
cups	beds	wishes

Note: For each variation in a category (1/2/3), there are six words that represent it.

Each student was instructed to read the word list aloud in a horizontal order in each category so that they would not notice that each column represented a single variation/allomorph. Then, their conversation was recorded in a quiet setting.

## Data Analysis

The analysis of data collected focuses on recognizing students' pronunciation of the inflectional morphemes being studied in each category separately. In addition, identify the phonetic representation of students' mispronounced forms.

For example, the inflectional morpheme -ed in the past tense *walked* was pronounced correctly as /t/ six times and wrongly nine times. It pronounced /d/ four times and /ed/ five times. In each category, the number of correct pronunciations of each variant was determined, and the percentage based on the total students' pronunciation was estimated.

## Results

### The pronunciation of -d/ed in Regular Past Tense

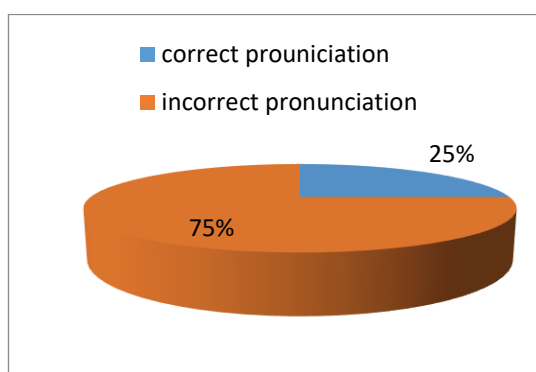
This section presents the proportions of correct and incorrect pronunciation of the inflectional morpheme d/ed with the /t, d, and id/ allomorphs in third person singular verbs forms.

### The sound /t/ in the inflectional morpheme -ed in regular past tense verbs

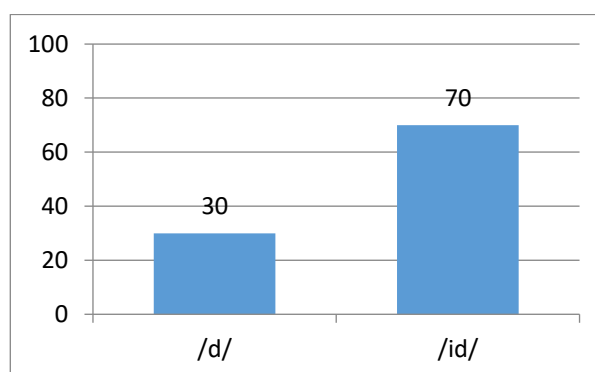
Figure 1 illustrates the pronunciation of the /t/ sound in the regular past tense. Noticeably, the correct pronunciation accounts for only 25% of the total, while incorrect pronunciation makes up the remaining 75%. This striking result clearly demonstrates the students' failure to master the pronunciation rule for



the regular past tense verb forms. Besides, Figure 2 shows that many students substituted the sound /t/ with /d/ and /id/. This suggests that many students practice the grapheme-phoneme correspondence strategy in pronouncing the -d inflectional morpheme, with a notable tendency among the majority to add the /i/ sound before /d/.



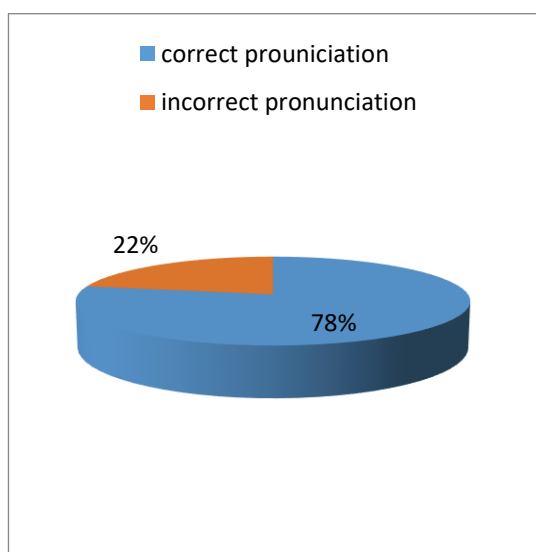
**Figure 1:** The pronunciation of /t/ sound in Regular Past Tense.



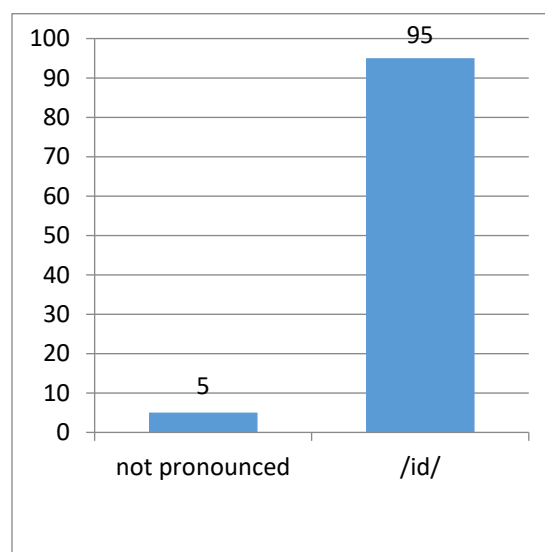
**Figure 2:** The phonetic representation of students' mispronounced /t/ in regular past simple.

### The sound /d/ in the inflectional morpheme -ed in regular past tense verbs

Figure 3 provides the pronunciation of the /d/ sound in the regular past tense morphemes. The pie chart reveals that approximately 78% of the pronunciation of /d/ in regular past verbs was accurate, whereas only about 22% was incorrect. This finding is consistent with the previous finding, which demonstrates the students' dependence on grapheme-phoneme correspondence, thereby ensured accurate pronunciation of most words in this category. A detailed analysis of the errors, as shown in figure 4, reveals that the predominant mistakes (95%) involved the substitution of the sound /d/ with the /id/, while a smaller proportion (5%) of errors were due to failure to articulate the sound altogether.



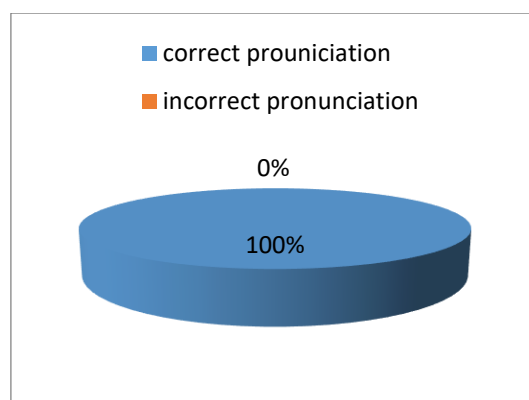
**Figure 3:** The pronunciation of /d/ in Regular Past Tense



**Figure 4:** The phonetic representation of students' mispronounced /d/ in regular past tense.

### The sound /id / in the inflectional morpheme -ed in regular past tense verbs

As anticipated, no errors were in this category. All participating students in the test successfully pronounced the /id/ sound in the regular past tense verbs of this group. This outcome supports the hypothesis that students of English at the Faculty of Education in Ghat rely on pronouncing the letter as written, and tend to frequently insert the sound /i/ before /d/ when pronouncing the -d /ed suffix in the regular past tense verb.



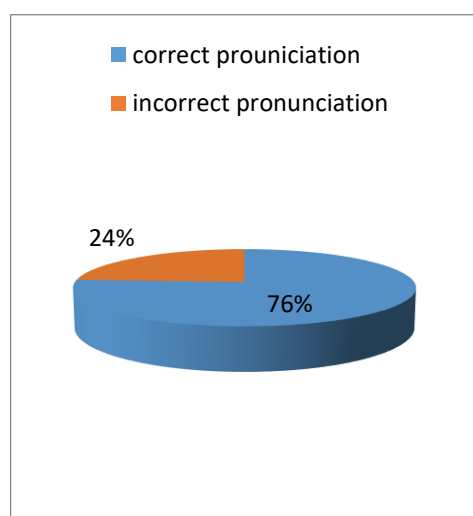
**Figure 5:** The pronunciation of /d/ in Regular Past Tense

### The pronunciation of –s in third person singular verbs

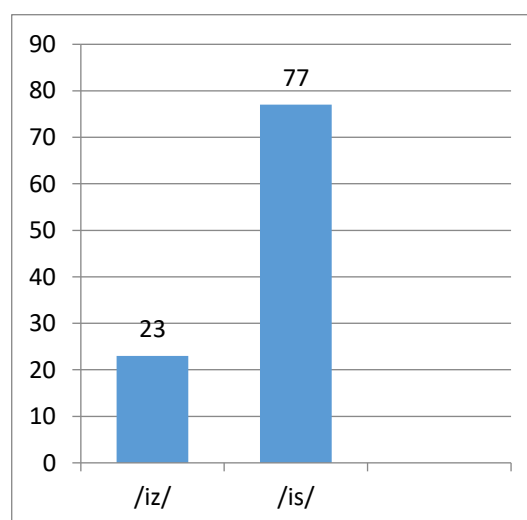
This section shows the proportions of correct and incorrect pronunciation of the inflectional morpheme -s with the /s/, /z/, and /ɪz/ allomorphs in third-person singular verb forms.

#### The sound /-s/ in the inflectional morpheme -s in third person singular verbs:

Figure 6 illustrates the proportion of correct and incorrect pronunciations of the sound /s/ in third-person singular verbs. Correct pronunciation accounted for 76% of the total, while incorrect pronunciation comprised the remaining 24%. The error rate was not significant, but it was attributed to the substitution of the sound /s/ with the sounds /ɪz/ and /ɪs/ at rates of 23% and 77%, respectively. Although /ɪz/ is an allomorph of the –s in third-person singular verbs, /ɪs/ is not. This finding suggests that students tend to epenthesize the sound /i/ before /s/ or /z/ in third-person singular verbs despite the preceding final sound in them.



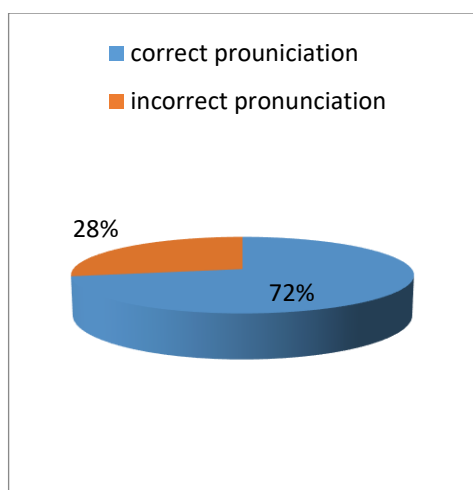
**Figure 6:** The pronunciation of /s/ in Third person Singular Verbs.



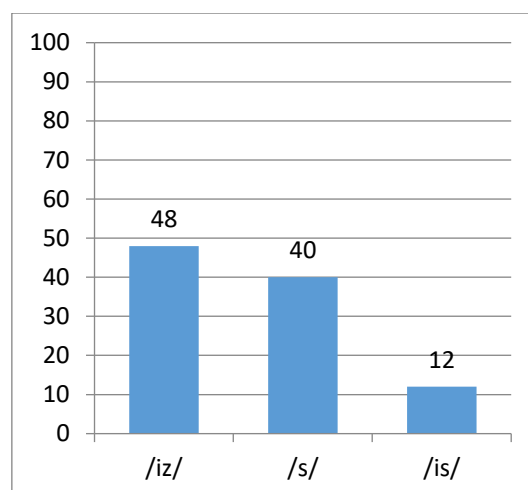
**Figure 7:** The phonetic representation of students' mispronounced /d/ in regular past simple.

### The sound /z/ in the inflectional morpheme -s in third person singular verbs

Figure 8 shows that the majority of third-person singular verbs with the sound /z/ were correctly pronounced, while 28% were not. A detailed analysis of the pronunciation errors, as shown in figure 9, indicates that the substitutions involved the sounds /ɪz/ (48%), /s/ (40%), and /ɪs/ (12%).



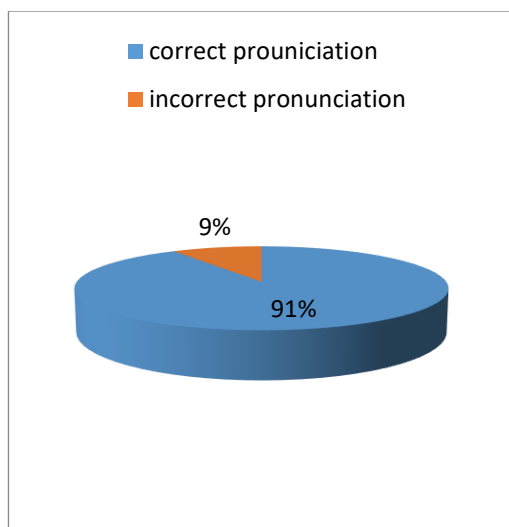
**Figure 8:** The pronunciation of /z/ in Third person Singular Verbs.



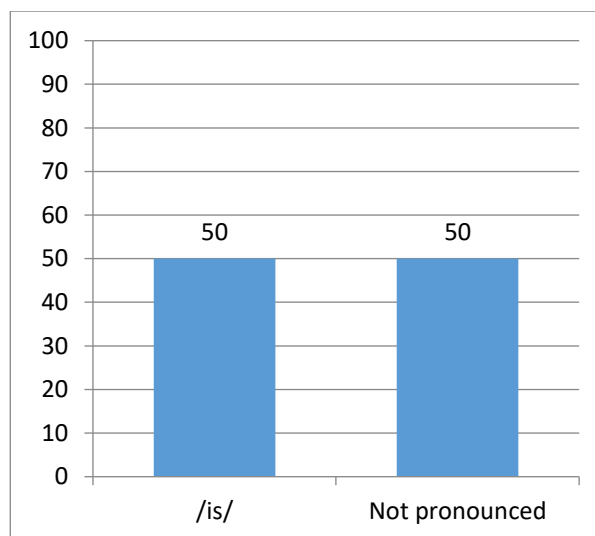
**Figure 9:** The phonetic representation of students' mispronounced /z/ in third person singular verbs.

### The sound /iz/ in the inflectional morpheme -s in third person singular verbs

Figure 10 shows a high success rate (91%) in pronouncing the /iz/ sound in third-person singular verbs, with only 9% of the total pronunciations being incorrect. A closer look at figure 11 reveals that errors involved substituting /iz/ with /is/, or failing to articulate the sound. Interestingly, the majority of these errors were made by a single student, indicating a specific challenge with pronouncing this sound. In general, the high accuracy rate in pronouncing the –s of third-person singular verbs among the three groups (2.1, 2.2, and 2.3) demonstrates students' strong grasp of the phonological rules for pronouncing the –s morpheme in third-person singular verbs.



**Figure 10:** The pronunciation of /iz/ in Third person Singular Verbs.



**Figure 11:** The phonetic representation of students' mispronounced /iz/ in third person singular verbs.

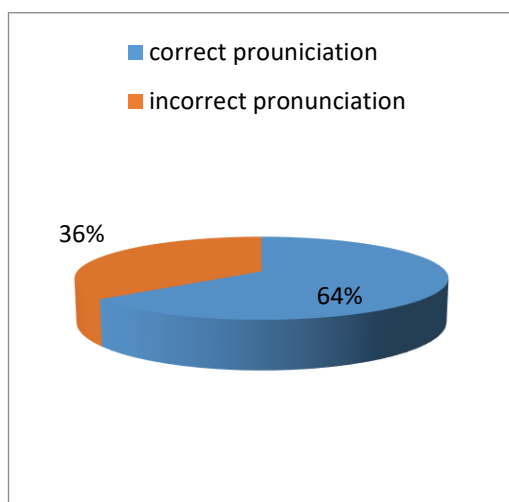
### The pronunciation of –s in Plural nouns

The groups under this section display the distribution of accurate and inaccurate pronunciation of the plural morpheme /s/ in its /s/, /z/, and /iz/ allomorphic forms.

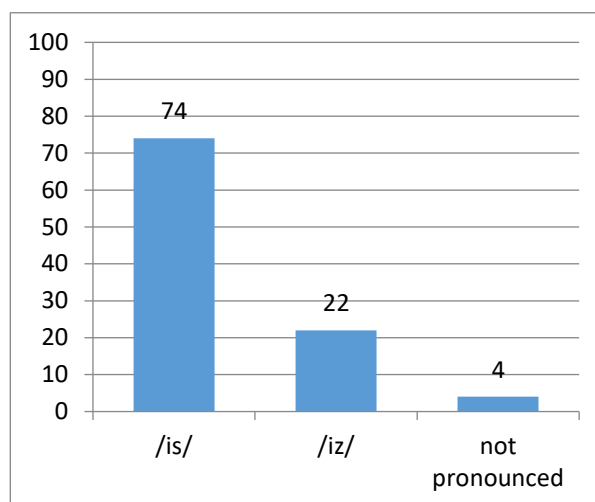
#### The sound /s/ in the Inflectional Morpheme -s in regular plural nouns:

Figure 12 shows that 36% of the plural nouns with the /s/ sound were mispronounced, whereas over half were correctly pronounced. Referring to Figure 13, the errors in pronunciation were primarily characterized by substituting the correct sound with /is/ (74%) and /iz/ (22%). A small proportion (4%) of the error involved failing to articulate the sound completely. There was a notable tendency from some students to repeat the addition of the /i/ sound despite the rule governing the pronunciation of /s/ based on the final sound.





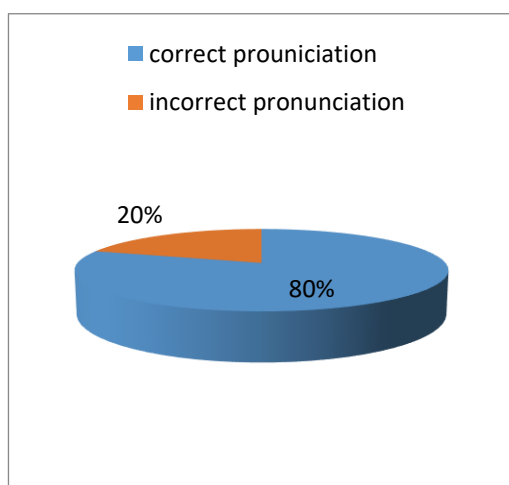
**Figure 12:** The pronunciation of /s/ in regular plural nouns.



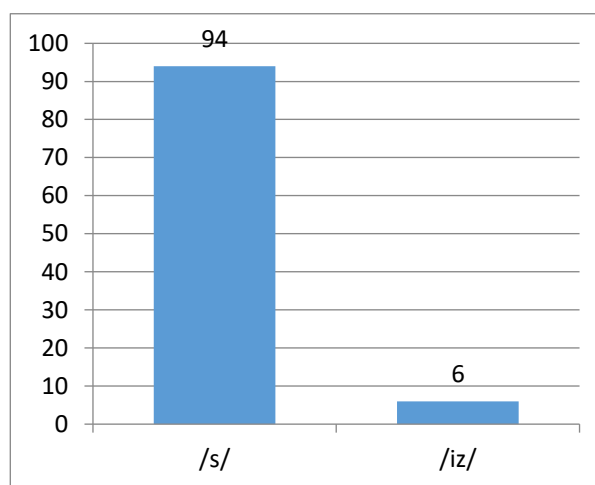
**Figure 13:** The phonetic representation of students' mispronounced /s/ in regular plural nouns.

### The sound /z/ in the Inflectional Morpheme -s in plural nouns:

Figure 14 further demonstrates a notable disparity between correct and incorrect pronunciation, with the correct pronunciation (80%) far exceeding incorrect ones (20%). This finding reinforces the earlier assumption that students of English in the faculty of Education at Ghat possess a good understanding of the phonological rules governing the pronunciation rules of the suffix 's.'. In terms of errors, by looking at Figure 15, it was found that approximately 94% of them were due to substituting the sound /z/ with the sound /s/. This suggests that some students struggle with confusion in producing the appropriate sound.



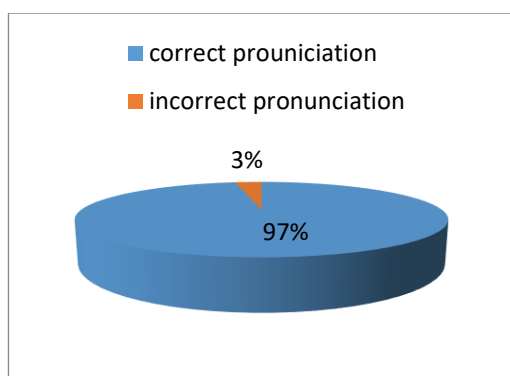
**Figure 14:** The pronunciation of /z/ in regular plural nouns.



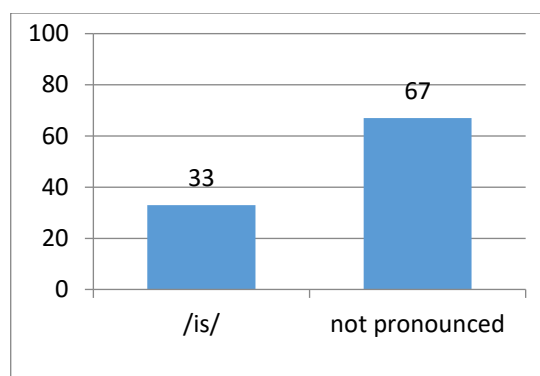
**Figure 15:** The phonetic representation of students' mispronounced /z/ in regular plural nouns.

### The sound /iz/ in the inflectional morpheme -s in plural nouns:

Figure 17 illustrates students' proficiency in pronouncing the sound in plural nouns, achieving a high success rate of 97%. However, errors were minimal, accounting for 3%, and were primarily due to the sound omission and substitution with the /is/ sound, as shown in Figure 18. Similar to the results for pronouncing /s/ in the third-person singular verbs, the findings for pronouncing /s/ in plural nouns show comparable patterns, where the rates of accurate pronunciation significantly exceeded incorrect pronunciation, indicating students' ability to grasp the rules governing the morpheme /s/ pronunciation.



**Figure 17:** The pronunciation of /iz/ in regular plural nouns.



**Figure 18:** The phonetic representation of students' mispronounced /iz/ in regular plural nouns.

### Discussion:

In terms of pronouncing the inflectional morpheme -d in regular past tense verbs, students show a strong preference for grapheme-phoneme correspondence. Most verbs were pronounced /d/, regardless of the voicing rules of the sound at the end of the main verb's infinitive.

The findings of this study were comparable to those of Mohamedahmed's (2021) study in Saudi Arabia at the College of Sciences and Arts, Turaif, Northern Border University. A survey of 20 male university students studying English as a foreign language in Saudi Arabia discovered that many struggle with pronunciation, particularly with -ed morpheme endings. They mistakenly assume that /d/ is the pronunciation for all ordinary past tense verbs ending in 'ed.'

Additionally, a thorough examination of the data in this study reveals that students tend to insert the vowel i before /d/, which results in a significant error rate due to the pronunciation of /id/ in verbs that should end with /t/ or /d/ sounds instead. Comparable results were obtained by Aoghala and Ali (2023), who sought to evaluate pronunciation challenges encountered by foreign learners of English in secondary schools in Ghat, southwest Libya. This study used qualitative research methodology. One of the most significant challenges with the learners was inflectional morpheme errors in which secondary-level students usually insert /i/ before /d/ in past verbs, regardless of the preceding phonemes.

Besides, the high percentage of proper pronunciation among English students at the Faculty of Education in Ghat suggests a reasonably good level of phonological awareness about the pronunciation rules of the suffix s'. However, the low rate of incorrect pronunciation indicates difficulty identifying or producing the necessary sounds. Analysing these errors reveals two pronunciation challenges: confusion in producing the appropriate sound, where /s/ was pronounced instead of /z/ and /z/ instead of /s/, resulting in sound substitution errors; and a tendency among students to insert the sound /i/ before /s/ or /z/, resulting in an epenthetic pronunciation.

To clarify the second issue, the sound /is/ is not one of the three allomorphs of the inflectional morpheme -s, but it emerges because some students used to add the /i/ sound before /s/ or /z/ when it is not necessary. The findings are consistent with those reported by Muna (2016). This study focused on the pronunciation of third-singular present verbs with an s/es ending among Thai and Indonesian undergraduate students at Institute Agama Islam Negeri IAIN Salatiga. The study discovered that Thai and Indonesian students speak plural nouns and third-person singular present verbs by changing the [s/z] sound to /əs/ and prefer to add the /ə/ sound before the /s/ or /z/ sound due to pronunciation problems.

All in all, the findings indicate a necessity for direct education on the pronunciation rules of inflectional morphemes. This can be accomplished through consistent instruction and training of students in the pronunciation of such morphemes during grammar classes on inflectional morphemes.

### Conclusion

In summary, this study explored how students pronounce English inflectional morphemes -ed and -s, focusing on common patterns and challenges. It was found that English students at the Faculty of Education in Ghat face more difficulty in pronouncing the inflectional morpheme "-ed" in the regular past tense verbs than the inflectional morpheme "-s" in regular plurals and third-person singular present verbs. In that the study demonstrates that students show good phonological awareness about the pronunciation rules of the suffix "s" in contrast to the "-ed" morpheme. They often pronounce -ed incorrectly due to confusion in grapheme-phoneme correspondence and insert /i/ before /d/ regardless

of the preceding phonemes. The latter reason is also found to cause students' inaccuracy in pronouncing the -s morpheme.

These findings highlight the need for greater emphasis on morphophonemic awareness in English language teaching, particularly in relation to inflectional endings, especially -ed in the regular past simple tense. Integrating pronunciation-focused activities into grammar instruction may improve learners' ability to produce these morphemes correctly.

However, the major limitation of this study is that the students are studying English in one faculty, so results may not generalise to other contexts. Further research needs to be carried out to investigate the impact of pronunciation training on students' accuracy with inflectional morphemes over time.

## References

1. Abker, I.A. A. (2020) Difficulties in pronouncing English morphemes among Saudi EFL students at Albaha University. A case study in Almandag. *Arab World English Journal (AWEJ) Volume*, 11.
2. Alic: Analyzing Language in Context (n.d) Chapter 12.2 Types of morphemes [WWW] Available from <https://alic.sites.unlv.edu/chapter-12-2-types-of-morphemes/> Accessed on [Aug the 26<sup>th</sup>, 2024]
3. Aoghala, S., & Ali, Z. (2024). Investigating Difficulties that EFL Students Face in English Pronunciation in Secondary Schools in Ghat-Libya. *Abhat Journal*, 16(2), 182-169.
4. Bauer, L. (2004). The function of word-formation and the inflection-derivation distinction. *Words in /their places. A festschrift for J. Lachlan Mackenzie*, 283-292. Accessed on [Aug 27<sup>th</sup>, 2024]
5. BBC Learning English (n.d) Pronunciation: 'ed' endings [WWW] available at [https://www.bbc.co.uk/worldservice/learningenglish/radio/specials/1413\\_gramchallenge26/](https://www.bbc.co.uk/worldservice/learningenglish/radio/specials/1413_gramchallenge26/) Accessed on [Sep the 9<sup>th</sup>, 2024]
6. Bui, M. C., & Nguyen, T. Q. (2022). THE CORRELATION BETWEEN HIGH SCHOOL STUDENTS'PHONOLOGICAL AWARENESS AND THEIR PRONUNCIATION OF ENGLISH INFLECTIONAL MORPHEMES–ED AND-S: A CASE IN THE MEKONG DELTA OF VIETNAM. *European Journal of English Language Teaching*, 7(4).
7. Davila, A. M. (2018). Pronunciation acquisition of the inflectional morpheme–ed in English by Nicaraguan Spanish speakers. *Open Science Journal*, 3(1).
8. Faisal, F. (2023). Investigating the Problems of Letters-Based Pronunciation. *Sprin Journal of Arts, Humanities and Social Sciences*, 2(11), 13-19.
9. Hamdeen, S. B., Al-Rajdhi, F., Majid, A. B., Al-Jerbhi, A., & Al-Rajdhi, L. (2024). EFL Students' Challenges in Pronouncing Inflectional Suffixes: A Case Study of Socotri Students of English. *Journal of Digital Sociohumanities*, 1(2), 102-110.
10. Insights opinion (2025) Quantitative Descriptive Research: Characteristics, Methods, and Examples. [WWW] <https://insightsopinion.com/quantitative-research/quantitative-descriptive-research-characteristics-methods-and-examples> Accessed on [June the 24<sup>th</sup>, 2025].
11. Ismai, M. A. R. (2016). Inflectional morphemes. *IJSRSET: International Journal of Scientific Research in Science, Engineering and Technology*, 2(2), 142-152.
12. Mohamedahmed, A. A. S. (2021). Pronunciations of the past tense inflectional morpheme-ed sounds among north border university students: diagnosis and remedy. *European Journal of English Language and Literature Studies*, 9(2), 23-32.
13. Muna, S. Z. (2016). The Differences between Thai and Indonesian Undergraduates in Pronouncing Plural Nouns and Third Singular Present Verbs due to Progressive Assimilation. *Register Journal*, 8(2), 195-209.
14. Nandito, I. K. (2016). Derivational and inflectional morphemes. *International Research Journal of Engineering, IT and Scientific Research*, 2(1), 22-29.
15. Rao, V. (2018). Pronunciation of word inflection: Grammatical morphemes and allomorphs. *Journal for Research Scholars and Professionals of English Language Teaching* 10, ( 2), p. 1-6
16. StudySmarter (2024) Allomorph [WWW] Available at <https://www.studysmarter.co.uk/explanations/english/english-grammar/allomorph/> Accessed on [Aug, the 31<sup>st</sup> 2024]
17. Unimrkt (2023) An Expert's Guide to Successful Quantitative Descriptive Research. [WWW] Available at <https://www.unimrkt.com/blog/an-experts-guide-to-successful-quantitative-descriptive-research.php> Accessed on [June the 24<sup>th</sup>, 2025]
18. Vitto, Cindy. L. (2006). *Grammar By Diagram - Understanding English Grammar Through Traditional Sentence Diagraming-Second Edition*. Canada: Broadview Press.
19. Wilk, J R (2022) *ENGLISH IRREGULAR VERBS: 300 irregular verb forms*. Jerzy Wilk.
20. William C J (2020) How English as a Foreign Language (EFL) University Students Understand the Pronunciation of Adjectives Ending in –ed. *Universidad de Costa Rica*. 44(1) pp. 1-21, 2020
21. Yule, George (2010) *The study of language*. Cambridge: Cambridge University Press.