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

Minh Chau Bui¹, Tien Quang Nguyen
Can Tho University, Vietnam

Abstract:
This study examined the relationship between high school students’ phonological awareness and their performance in pronouncing allomorphs of English inflectional morphemes -ed and -s. The study involved 31 high school students in Can Tho City in the Mekong Delta of Vietnam. Data of the study were collected through a pronunciation written test (PWT) and a pronunciation oral test (POT). The findings pointed out that all the students had phonological knowledge of the two morphemes; however, the majority of the participants made errors in pronouncing them which indicated their lack of pronunciation performance. In addition, there was no correlation between the students’ phonological awareness and their pronunciation performance detected in the study. Based on the results, pedagogical implications were suggested.

Keywords: inflectional morphemes, phonological awareness, phonetic performance, correlation, Vietnamese high school students

1. Introduction

In the English language teaching field, English pronunciation seems to be a crucial area since it provides students with the knowledge they need to effectively grasp and communicate in the language. According to Sibaja (2019), students can prevent misconceptions in the target language by mastering the right English pronunciation. In addition, Yuzawa (2007) affirmed that it is vital for a learner to have intelligible English pronunciation if he/she desires to successfully communicate in English. However, for numerous reasons, teaching pronunciation is challenging. As Darcy, Ewert and Lidster (2012) asserted, teachers are frequently left without clear rules and are presented with inconsistent aims and methods for pronunciation training. Moreover, Derwing and Foote

¹Correspondence: email bmchau@ctu.edu.vn

Copyright © The Author(s). All Rights Reserved.
Minh Chau Bui, Tien Quang Nguyen
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

(2011) accepted that in pronunciation instruction there is no well-established systematic method for determining what to teach, when to teach it, and how to teach it.

In the Vietnamese context, English is a fundamental and required subject at schools, starting from elementary grades. Additionally, English centres are popular in many places around Viet Nam, particularly in big cities. Accordingly, the number of people learning English is not small and their learning starting time is also different. However, irrespective of at what age they start learning English, very few can have a good pronunciation unless they receive additional instruction or are extraordinarily gifted (Nguyen, 2007). This phenomenon was also noted by Ha’s (2005, p.35), “Many Vietnamese speakers can speak English, but just a minority have decent English pronunciation such that they can be easily heard in direct dialogue with foreigners.”

On the other hand, Viet Nam, like most other East Asian countries, has traditionally used “teacher-centred, book-centred, and grammar-translation methods” to teach EFL (Liu & Littlewood, 1997), where learners demonstrated “a great deal of dependence on the teacher” (Tomlinson & Dat, 2004, p.200), and were positioned to receive knowledge, primarily from their teachers. In addition, Vu (2016) indicated that the primary goal of studying and teaching English in Vietnamese contexts was to pass exams or obtain certifications, resulting in “students possibly achieving the greatest exam scores while failing to execute their competence in real-life performance” (Hoang, 1999, p.79).

It is also worth noting that the Vietnamese language contains phonotactic features that prevent native learners from achieving native-like English pronunciation (Nguyen, 2007). The restriction of Vietnamese word-final sounds and the prevalence of English word-final consonant mistakes produced by most Vietnamese speakers have sparked considerable interest in this field of study. More remarkably, Hayashi (2008) pointed out that Vietnamese students seem to have difficulty recognising the allomorphs of inflectional morphemes -s and -ed and tend to omit consonants and grammatical endings when speaking English.

In Vietnam, there has been research on EFL learners’ pronunciation of morphemes, which is beneficial for teaching methodology. Nonetheless, there have not been many studies focusing on the relationship between high school students’ pronunciation knowledge and their performance. With the purpose of exploring whether there has been any correlation between these, this thesis has been conducted in the context of a high school in the Mekong Delta of Vietnam.

The study attempted to find out the answers to the three following questions:

1) How is students' awareness of allomorphs of English inflectional morphemes -ed and -s?
2) How is students’ performance in pronouncing allomorphs of English inflectional morphemes -ed and -s?
3) What is the correlation between students’ awareness and their performance in pronouncing -ed and -s morphemes?
2. Literature Review

2.1. Overview of English Pronunciation

English pronunciation is essential since it equips students with the knowledge they need to effectively communicate in this language. According to Yuzawa (2007, p.95-96), learners need an intelligible English pronunciation in order to use English communicatively. In addition, Celce-Murcia, Brinton, and Goodwin (1996) stated that the comprehensive perspective of pronunciation involves a concern about how pronunciation is actually utilised in communication; that is, how pronunciation helps express as well as comprehend the lexical, grammatical, and sociolinguistic meaning. This view is congruent with that of Pennington and Richards (1986), which state that pronunciation is a crucial element in conveying referential meaning and a fundamental component of the interactional system of communication. Henceforth, we should not isolate pronunciation from communication and other aspects of language use.

Also, regarding the role of pronunciation, Gilakjani (2012) affirmed that pronunciation is important in language usage, language development, and language acquisition. Moreover, it seems that whenever “students and teachers complain about speaking difficulty, they are frequently talking about pronunciation” (Nation, 2009, p.75). This is similar to Derwing and Munro’s (2005) discussion that one might find it useful for efficient communication to have good pronunciation, especially intelligibility, the most crucial aspect of pronunciation, which refers to achieving a level of pronunciation that does not limit learners’ ability to communicate (Nikbakht, 2010).

Additionally, nowadays Communicative Language Teaching (CLT) approach has made the roles of pronunciation changed; that is, students not only must have an excellent understanding of vocabulary, appropriate grammar, and the four language skills but also need perfect pronunciation in the process of developing, using and then acquiring a target language (Gilakjani, 2012; Nikbakht, 2010). As a result, understanding English pronunciation is critical for students, whether for tests or for general language communication (Fraser, 2000).

2.2. English Morphemes

Many English words can be broken down into their simplest elemental constituent. For example, English word forms like loves, loving, loved, and lover must have one element ‘love’ as well as a number of additional parts (named as morphemes) like -s, -ing, -ed, and -er. Morphemes can be simply defined as “a minimal unit of meaning or grammatical function” (Yule, 2006, p.63). That is to say, a morpheme is a language’s smallest meaningful and syntactic or grammatical element that cannot be separated without affecting its real meaning.

Fromkin, Rodman and Hyams (2003) indicated that morphemes can be classified into two types: free morphemes and bound morphemes. ‘Free morphemes’ are words that may stand alone and have a defined meaning, such as free, get, human, song, and love.
While ‘bound morphemes’ do not have meaning on their own and maybe constructed using free morphemes. This ‘bound morphemes’ category consists of conjunctions, prepositions, determiners, and pronouns. In addition, free morphemes are divided into two subtypes: (1) lexical morphemes, and (2) grammatical or functional morphemes, while bound morphemes can be categorised into two sub-classes: (1) derivational and (2) inflectional. Meyer (2010, p.152-153) listed a few inflectional morphemes in English such as -s/-es, -ing, -ed, -er, -est, among which the two morphemes -s/-es and -ed, with three allomorphs each, are commonly concerned by Vietnamese EFL teachers and learners. These allomorphs are presented in Figure 1.

Figure 1: Allomorphs of inflectional morphemes -s/-es and -ed

### 2.3. Phonological Awareness and Phonetic Performance

Phonological awareness (PA) is commonly defined as the capacity to attend to, identify, and use a range of sounds in the speech stream (Gillon, 2004; Schuele & Boudreau, 2008). According to Venkatagiri and Levis (2009), at the segmental level, phonological awareness can be considered as the combination of “phonetic awareness” and “phonemic awareness”, which comprises four components or levels, namely word awareness, syllable awareness, onset-rime awareness, and phoneme awareness (Treiman & Zukowski, 1991). Likewise, Anthony and Francis (2005) demonstrated that phonological awareness denotes a person’s sensitivity to the sound structure of oral language. Huang, Lin, and Su (2004, p.61) also regarded phonological awareness as “phonemic awareness, syllable awareness, and phonogram identification”. In this study which focused on -ed and -s morphemes, learners’ knowledge of pronunciation refers to their phonological awareness; that is, learners will be concluded to have pronunciation knowledge of the English final consonants -ed and -s when they have the awareness of and the ability to manipulate the sound structures of these morphemes.

Phonetic performance refers to the actual use of the language in real situations (Taha & Reishaan, 2008). In Farouck’s (2016) definition, phonetic performance is seen as the ability to fluently produce comprehensive output in the target language while Taha and Reishaan (2008, p.49) depicted in more detail that phonetic performance is “a technique utilised in phonetics wherein prospective practitioners of the discipline are instructed to control the use of their vocal organs”. In other words, phonetic performance or pronunciation performance is a kind of linguistic performance which requires both
speech production and speech understanding or the capacity to communicate effectively using internalised information.

2.4. Factors Affecting the Development of Pronunciation Knowledge and Performance

Studies have shown that there are a number of factors impacting English pronunciation development. These factors are categorized into two main types: (1) internal factors and (2) external factors. Internal factors comprise aptitudes, types of learners, and motivation. External factors to be mentioned are age, first language (L1) transfer, teacher roles, language teaching pedagogy, and classroom environment.

2.4.1. Internal Factors

Of the internal factors, aptitudes and types of learners refer to learners’ ability and personality. Aptitude is defined as a “disposition to be able to do something well” (McDonough, 1981, p.17), or a special ability for learning an L2 (Carroll, 1981), or more specifically, an innate ability which helps a learner perform any task such as learning the pronunciation of a language (Harmer, 2001). In terms of personality, Hedge (2000) specified two types of learners: extraverts who are sociable, like parties, have many friends, and need excitement and introverts who are quiet, prefer reading to meeting people, have few but close friends and usually avoid excitement. According to Hedge, extraverts are likely to have more opportunities to enhance their pronunciation of the target language and are generally more fluent than introverts in both the mother tongue and the second language (L2) although extraverts are not necessarily more accurate in their L2. Accordingly, the first two internal factors are indispensable for language learning, especially pronunciation development.

Another important factor that should be noted is motivation which can impact learners’ language acquisition in general and their development of pronunciation of the target language in particular (Dörnyei, 1998). In Gardner’s (2000) definition, motivation is composed of goal, desire, attitude and effort. Specifically, a motivated learner, first, should have a goal for learning the language, together with a desire to achieve the goal. In addition, they must have positive attitudes toward the target language, towards the community as well as the learning process, and make their best effort to achieve the goal. Levis (2005) also affirmed the importance of setting a goal for learning. The author went on suggesting that since good pronunciation means intelligible pronunciation, learners should keep in mind the intelligibility principle while setting up their goals for the ESL classroom. It is proved that learners with high motivation are more active in class, less likely to drop out, and more likely to succeed in formal learning contexts (Marinova, Marshall & Snow, 2000; Shaaban, 2002).
2.4.2. External Factors

External factors consist of age, L1 transfer, teacher roles, language teaching pedagogy, and classroom environment.

Among the external factors, the first one to be mentioned is age. According to the Critical Period Hypothesis (Lenneberg, 1967), there is a period during which language acquisition is easy and complete (i.e. native-speaker ability is achieved) and beyond which it is difficult and typically incomplete. Secondly, the development of pronunciation can be affected by a learner’s L1 transfer. In the field of Second Language Acquisition, the transfer is to be seen as a general term for a number of different kinds of influence resulting from the similarities and differences between the target language and any other language that has been previously (and perhaps imperfectly) acquired (Ellis, 2008). Therefore, L1 transfer refers to the influence that the learner’s L1 exerts over the acquisition of an L2. In the domain of pronunciation learning, this impact has also been a concern. For instance, Flege (1980) and Wu (1993) reported that a learner’s native language might interfere with the target language, causing pronunciation problems. According to Lado (1957) and Hockett (1972), when learning English phonemes students seek an equivalent sound in their mother tongues and then substitute it for the target sound. It was also proved that if the first language and the target language have a different phonological structure, the learner will have problems acquiring that structure in the second language because of unfamiliar phonological rules of the second language (Fatemi, Sobhani & Abolhassan, 2012). In contrast, if there are similarities between the two languages, it is simpler and easier for a learner to learn the pronunciation of the second language (Fatemi, Sobhani & Abolhassan, 2012). These conclusions set up explanations for the question of why Vietnamese native speakers have several challenges while learning foreign languages that are not as near to and as simple as their own.

The next factor to discuss is teachers’ roles in English pronunciation instruction. According to Savignon (1997), pronunciation instruction does not have a static position in most language curricula, resulting in individual teachers adding pronunciation instruction into their courses by themselves in order to follow the current trend in English Language Teaching (Harmer, 2001). More importantly, due to a lack of formal training as well as program directions, it is up to teachers to prepare themselves on how to best fulfil the requirements of their learners (Derwing & Rossiter, 2002; Fraser, 2004). As a result, most teachers choose not to deliver any teaching at all, and those who opt for teaching it often use a hit-or-miss strategy, depending on materials that lack foundation and the desired effects (Fraser, 2004).

Fourth, it needs to be noted that appropriate use of English language pedagogy in language classrooms can facilitate learners’ pronunciation (Richard & Schmidt, 2011). According to Jianbin and Fang (2013), explicit pronunciation instruction can increase students’ awareness by introducing to them phonetic symbols and theories to boost their communicative ability, their proficiency in language and their self-confidence in verbal interaction. In contrast to the idea by Jianbin and Fang (2013), Zhang and Yin (2009)
Minh Chau Bui, Tien Quang Nguyen
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

suggested that teaching pronunciation should be taught using a communication-based approach along with forthcoming communicative practices in order for learners to be able to communicate effectively. Also, Hoang (1999) pointed out that in the age of integration and globalisation, traditional teaching methods which focus on grammar and vocabulary learning do not meet the needs of English learners. In other words, what a learner gains from the traditional method is his accuracy in the written language, but not fluency in the spoken language (Wright, 2002). Regarding pronunciation teaching, there should be a balance between delivering pronunciation knowledge or raising phonological awareness and giving pronunciation practice (i.e. performance); otherwise, this may cause a gap in the students’ phonological awareness and their phonetic performance. In sum, in order to boost the acquisition of English pronunciation, there should be the right use of teaching methodologies in the right environment in language classrooms.

Finally, the classroom environment is said to have an influence on English pronunciation improvement in non-native English-speaking countries because, as (Dörnyei, 2005) confirmed, the way a learner perceives his proximal educational environment may shape the learning paths along with the learning outcomes (Williams & Burden, 1997). It is obvious that in non-English speaking countries, learners do not have real-life situations and interactions to learn English and improve their pronunciation; hence, schools and teachers should provide enough space, communicative activities and authentic materials so that learners are willing to get involved in learning (Szyszka, 2018).

2.5. Problems of EFL/ESL Students in Learning English Pronunciation
Learning English pronunciation is very important for EFL/ESL students. However, despite being aware of its significance, EFL/ESL students continue to struggle with achieving perfect English pronunciation. A lot of research indicates that the interference of a learner’s native language can cause problems with pronunciation (Flege, 1980; Wu, 1993). That is when confronting a new sound in the target language, learners are likely to relate it to a similar sound in their mother tongue and replace it with the L1 sound (Hockett, 1972; Homiedan, 1984; Kalaldeh, 2016; Lado, 1957).

Like other EFL/ESL students all over the world, Vietnamese students also have some common errors while pronouncing English lexical items. According to Ha (2005), the English sound system contains various sounds that are unfamiliar to Vietnamese speakers resulting in their difficulties in pronouncing these sounds such as fortis and lenis, plosive consonants, fricatives, affricates, nasals, and laterals. Not only that, the way English speakers pronounce the final sounds differs significantly from the way Vietnamese speakers do, making it more difficult for the latter to acquire accurate English pronunciation. As a result, Vietnamese learners are often found to make phonemic mistakes, leading to unintelligible English speaking.
Despite the fact that Ha (2005) collected data from a large number of informants, the research is unilateral, focusing solely on the difficulties of individuals from the North, whose results, therefore, cannot be generalized to all Vietnamese learners of English. This limitation was solved by Neumann’s (2007) findings. In the findings report of Center of Applied Linguistics (Neumann, 2007), all the errors that Vietnamese speakers from all regions of the country could make were presented. Among these errors, the most common was the final consonant ones. According to Nguyen (2007), final consonants in the Vietnamese language are simply nasal consonants /m, n, N/ and unaspirated voiceless plosives /p, t, k/ with their allophones. The narrow codas, along with a non-cluster mother tongue, make it difficult for Vietnamese people to properly pronounce any foreign language with a large range of final consonants and clusters, like English.

In addition, the structure of English syllables is different from Vietnamese. It can easily be recognized that, except for /h/, /w/, and /j/, almost every English consonant appears in word-final position (Nguyen, 2007). Furthermore, as previously stated, English includes a large number of complex consonant clusters that combine two, three, or even four consonants in the onset and coda, and as Yule (2006, p.48) described, it was “very uncommon for languages to have consonant clusters of this sort”.

More importantly, Hayashi (2008) pointed out that among all the final consonant errors that Vietnamese students frequently make, various allomorphs of morphemes -s and -ed are remarkable. In fact, Vietnamese students seem to have difficulty recognising these allomorphs and tend to omit consonants and grammatical endings (Hayashi, 2008). According to Nguyen (1970a, 1970b) and Hayashi (2008), Vietnamese students omitted or mispronounced /s/, /z/, and /iz/, which indicate a plural form suffix, and /t/, /d/, and /id/, which indicate a past tense suffix. Hayashi also stated that the mispronunciation of Vietnamese students can be the result of the fact that words in Vietnamese are monosyllabic leading to their not being accustomed to creating multisyllabic words. The author also elaborated that in order to establish grammatical ends the learners needed to pronounce words with more than one syllable; therefore, they were possibly unable to do it correctly. From that understanding, this current study focuses on these two kinds of inflectional morphemes with their various allomorphs.

2.6. MOET’s Assessment of Pronunciation in High School Graduation Examination

The Vietnamese Ministry of Education and Training (MOET) assesses students in the high school graduation examination, also known as the Vietnamese National high-school graduation exam (NHSGE). This is a nationally standardised exam that determines whether students can graduate from high school and continue their education after high school (Nguyen, 2020). The English exam consists of 50 multiple-choice questions divided into five sections: phonetics, communication skills, vocabulary, grammar, reading skills, and writing skills. The Phonetic component, in particular, has four questions: vowel pronunciation 25%, final consonant -s and -ed 25% (12.5% each), stress for two-syllable phrases 25%, and stress for three-syllable words 25%. Thus, students’ pronunciation is
examined just through a paper-and-pencil test with multiple-choice questions, whose results seem only to indicate the students’ phonological awareness. Accordingly, high school students would be driven more on knowledge to deal with the written pronunciation exam questions than on their pronunciation practice (Nguyen, 2020). As a result, there may be a gap between students’ knowledge and performance in pronunciation, particularly in pronouncing final consonants -s and -ed.

2.7. Related Studies
Several studies have been conducted on pronunciation problems of EFL / ESL students (Aliyu, 2017; Ha, 2005; Nguyen, 2007; Hayashi, 2008; Kalaldeh, 2016).

In his study, Kalaldeh (2016) reported some of the most common English pronunciation mistakes made by Jordanian students at the University of Jordan, including English consonants, vowels, consonant clusters, and word stress. Based on the findings, Kalaldeh concluded that “Jordanian students have difficulty in producing the following consonants /p - η - ɹ - ɫ/ which are almost always produced as /b - ɡ - ɾ - l/ in all contexts” (p.413). In 2017, Aliyu conducted a study about the pronunciation of the grammatical morphemes -ed and -s of senior secondary school students in North-Eastern Nigeria. The author affirmed that the students made mistakes in both the inflectional morphemes -ed and -s due to a lack of morpheme awareness.

Regarding Vietnamese learners of English, Hayashi (2008) made an observation of one overseas Vietnamese student’s pronunciation to identify his/her errors and remedy them. Hayashi realised that this participant studied English without listening to his own pronunciation, even in a fundamental term, and as such many mistakes were consequently made. Hayashi attributed these errors to the influence of the Vietnamese language known as a monosyllabic language, and the student’s unfamiliarity with using a multisyllabic language, like English. The author also admitted that he failed to fix his participant’s pronunciation because the student was unaware of his faults. Hence, Hayashi suggested allowing Vietnamese students to detect their own pronunciation errors first then learn to pronounce them correctly and inspire them to practice and assign them enough responsibilities.

Another study, carried out in Vietnamese contexts by Ha (2005), focused on both typical Vietnamese pronunciation errors and the sound system of English / Vietnamese. The participants were students at the Department of English-American Language and Culture, College of Foreign Languages - VNU. The study explored various phonetic mistakes that students frequently made when pronouncing a variety of English consonants. The data were gathered from the questions and answers, processed, and compared with English pronunciation guidelines to provide reasons for errors. The author pointed out that in the English sound system there are different sounds that are not familiar to Vietnamese speakers.

Also aiming at discovering Vietnamese learners’ difficulties in pronouncing final consonants, Nguyen (2007) conducted a research in which he observed the Vietnamese
learners’ attempts to pronounce English word-final consonants in terms of removing, adding schwa, or substituting with sounds more similar to those found in their mother tongue, and had a comparison between English and Vietnamese syllable structures. The author indicated that the major reason for the participants’ pronunciation problems was that the Vietnamese language contains simply final nasal consonants /m, n, N/ and unaspirated voiceless plosives /p, t, k/ with their allophones.

In addition, a number of studies on the role of phonological awareness have suggested that there might be a relation between EFL phonological awareness and pronunciation performance. Firstly, in Souza’s (2015) doctoral research on adult language learners with the aim of examining the relationship between L2 phonological awareness and L2 pronunciation, the two variables were found to be strongly related. Souza (2015) also asserted that learners having high degrees of phonological awareness were likely to achieve more native-like pronunciation. Consequently, according to the researcher, raising L2 phonological awareness is crucial in the acquisition of L2 pronunciation. Finally, Namaziandost, Esfahani and Hashemifardnia (2018) carried out classroom action research to determine the effect of teaching phonological rules on the pronunciation of fifty Iranian pre-intermediate EFL learners divided into a control and an experimental group. The results revealed that the experimental group outperformed the control group, indicating the importance of phonological knowledge in learners’ pronunciation performance.

In summary, current literature focuses on English pronunciation errors, some of which address Vietnamese students’ production of final consonants (Nguyen, 2007; Hayashi, 2008). The results of the aforementioned studies offer evidence to support the viewpoint that non-native learners of English, including Vietnamese students, face difficulties in learning English pronunciation in general and in pronouncing the morphemes -ed and -s with their allomorphs in particular. Also, the relationship between learners’ phonological awareness and phonetic performance could be observed in several studies. Nonetheless, to my knowledge so far, there were few studies on Vietnamese high school students’ problems in pronouncing English inflectional morphemes -s and -ed, especially on the interaction between their phonological awareness and phonetic performance. For these reasons, the researcher conducted this research to have insight into this issue.

3. Material and Methods

3.1. Design

The study used a descriptive approach, using quantitative data from a paper exam (PWT), and an oral test (POT). The research was conducted over two weeks (during February and March 2022).
3.2. Participants
The participants in the study were thirty-one students of Grade 11 (29 females and 2 males) in a high school in the Mekong Delta in Vietnam. This was a convenience sample because they were in the class where the researcher did his practicum. Their ages ranged from 16 to 17. By the time of conducting the research, all of the students had learnt English for seven to ten years.

3.3. Classroom Learning Material
In their English class, the subjects of this study studied the new English textbook of the MOET published by Vietnam Education Publishing House. In the book, there are two volumes with five units each. Each unit consists of nine sessions which are Getting Started, Language, Reading, Speaking, Listening, Writing, Communication and Culture, Looking back and Project. After the first three units and the last two units of each volume, there is a review. The researcher began to work with the students from the Language part of unit 8 in volume 2.

3.3. Research Instruments
The research employed a pronunciation written test (PWT) and a pronunciation oral test (POT).

   The Pronunciation Written Test (PWT) with the purpose of measuring the participants’ phonological awareness was designed based on the format of NHSGE by the MOET which were all multiple-choice questions with four alternatives for each. The PWT included 20 questions focusing on -s and -ed sounds within various target words (ten questions for each sound). The target words would be lately assessed in the POT test. All of the target words were chosen from a prior unit that had already been taught in class, so students were already familiar with them.

   The Pronunciation Oral Test (POT) was divided into two parts:
   Part I: Students were asked to read 20 target words and phrases/sentences out loud so that they could be recorded and analysed.
   Part II: Students made and then immediately read out loud sentences with the 20 target words, using the simple present tense or simple past tense.

Each component of POT had a distinct function. Part I’s goal was to extract data from students’ records about the sounds they frequently mispronounced even when their attention was paid to pronunciation. Part II, on the other hand, evaluated students' performance when they focused merely on constructing sentences rather than pronunciations. This section demanded a greater level of performance from students, as they were asked to not only create sentences using the provided words but also pronounce them correctly. However, generating a sentence with proper grammar and meaning was not the focus of the test; rather, it served as a hook to attract students' attention while the students’ pronunciation of those sentences was the only to be examined.
3.4 Scoring Method
To evaluate students’ knowledge and their performance, a score range of classification of students’ achievement by Arikunto (2009) has been adapted to a 10-points scale as illustrated in Table 1.

<table>
<thead>
<tr>
<th>Score range</th>
<th>Classifications</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 - 10</td>
<td>Good</td>
<td>Above average</td>
</tr>
<tr>
<td>5 - 7.9</td>
<td>Fair</td>
<td>Average</td>
</tr>
<tr>
<td>0 - 4.9</td>
<td>Poor</td>
<td>Below average</td>
</tr>
</tbody>
</table>

The maximum score for PWT was 10; therefore, each correct answer for one question received 0.5. The POT also had a maximum score of 10. Each part was scored as described below.

- Part 1 required the participants to read 20 words and 20 phrases/sentences with a maximum score of 10. Each mistake in pronunciation would receive a penalty of 0.25.
- In Part 2, the students had to make sentences with the given words. The maximum score was 10 and each mistake in pronunciation would receive a penalty of 0.25.
- The formula for the final score of the whole oral test was \( \left( \frac{\text{score part 1} + \text{score part 2}}{2} \right) \), for the maximum score for each part was 10.

The examiner was the researcher himself, who was previously trained for the scoring technique by a university lecturer well-experienced in both pronunciation teaching and evaluating pronunciation oral tests. The researcher listened to each recording twice. In the first listening, he listened to each and every recording and carefully noted down the incorrectly pronounced words containing the -ed and -s sounds. Then, he made the grading. After one week, the researcher made the second listening with the exact procedure as the first one, and then a comparison of the two grading results was made for a double check of the scorings to ensure the reliability and validity of the results.

3.4. Data Collection Procedures
Prior to the research, a consent form was delivered to the participants to ensure the research ethics. Therefore, the students acknowledged that they were recorded during the oral test and could have a voice if they disagreed.

In order to avoid students’ recollection from the PWT resulting in their preparation in advance for the POT, the PWT comprised a greater number of lexical items from the textbook (Tieng Anh 11, volume 2) compared to the POT which just focused on the twenty target words. Furthermore, the PWT was conducted a week prior to the Pronunciation Oral Test (POT), and during testing time, students were separated so that they could not replicate the replies of others. Due to the pandemic, virtual meeting rooms were the best choices for this research to gather participants’ verbal data. That is to say,
one week after finishing the PWT, the participants performed POT through an online meeting room on Zoom. Each participant was invited to a separate ‘breakout room’ where they would not be overheard by others in ‘the hall’. Each participant did the POT in around 5-10 minutes and their performance was recorded for later analysis. All the data from the PWT and POT were added to the Statistics Package for the Social Sciences (SPSS) for analysis.

4. Results and Discussion

4.1. Students’ Knowledge of English Inflectional Morphemes -s and -ed

The PWT has been administered to evaluate the students’ knowledge of pronunciation that they have learnt at school. The test had 20 questions, each of which was valued at 0.5 scores and the maximum score was 10. The test revealed various remarkable results.

<table>
<thead>
<tr>
<th>Classification</th>
<th>Number of Students</th>
<th>Percentage</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>23</td>
<td>74.1</td>
<td>8.783</td>
<td>.605</td>
</tr>
<tr>
<td>Fair</td>
<td>6</td>
<td>19.4</td>
<td>6.75</td>
<td>.946</td>
</tr>
<tr>
<td>Poor</td>
<td>2</td>
<td>6.5</td>
<td>2.5</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>31</strong></td>
<td><strong>100</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As indicated in Table 2, the PWT participants’ scores were generally high, with 23 students out of 31, accounting for 74.1 per cent, scoring between 8 and 10 while just 2 of them scored less than 5 (6.5 per cent). In conclusion, the results pointed out that students’ knowledge of pronunciation was quite good.

A detailed analysis of the distribution of students’ scores in the PWT revealed that the majority of the participants were at the above-average level of phonological awareness. In fact, although only one student had the highest score (10 points), 22 others received scores ranging from 8 to 9.5 points, and none got a zero, which means that every student in the class had more or less awareness of English pronunciation. However, there were still 2 participants receiving below-average scores (less than 5); hence, this finding could be explained by Krashen’s (1981) theory that the English pronunciation knowledge of each and every individual in the class significantly differed.

For deeper analysis, students’ mistakes have been calculated and divided into two categories: mistakes in using -s and those in using -ed. This result is illustrated in Table 3.

<table>
<thead>
<tr>
<th>Classification</th>
<th>Number of mistakes&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Percentage</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>-s</td>
<td>76</td>
<td>60.8</td>
<td>2.452</td>
<td>2.284</td>
</tr>
<tr>
<td>-ed</td>
<td>49</td>
<td>39.2</td>
<td>1.581</td>
<td>2.028</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>125</strong></td>
<td><strong>100</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup> Total mistakes of all students for each morpheme in the PWT.
As can be seen, with 76 out of 125 total mistakes, accounting for 60.8 per cent, the number of -s mistakes was nearly two times higher than the number of -ed mistakes (only 49 out of 125 accounting for 39.2 per cent). These statistics implied that the students had more difficulties in recognizing the allomorphs of morphemes -s in comparison with -ed. The results are reinforced by Aliyu (2017), who found that students committed errors in both the inflectional morphemes -ed and -s due to a lack of morpheme awareness. It can be observed that the mean value of the inflectional morpheme -s was greater than that of -ed. Therefore, it is possible to conclude that there is a distinction between students’ errors in these two inflectional morphemes. These findings were consistent with Aliyu’s (2017), which indicated that a majority of students had problems in the plural -s in specific noun phrases and the third-person singular -s in indicative verbs as well as incorrect usage of the past tense marker -ed.

4.2. Students’ Performance in Pronouncing English Inflectional Morphemes -s and -ed

<table>
<thead>
<tr>
<th>Classification</th>
<th>Number of Students</th>
<th>Percentage</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Fair</td>
<td>20</td>
<td>64.5</td>
<td>6.299</td>
<td>.838</td>
</tr>
<tr>
<td>Poor</td>
<td>11</td>
<td>35.5</td>
<td>3.627</td>
<td>.395</td>
</tr>
<tr>
<td>Total</td>
<td>31</td>
<td>100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

One striking point revealed from Table 4 was that none received ‘good’ scores while more than thirty-five per cent got poor scores (less than 5) which was more than 5 times as much as the students in the PWT (6.5 per cent). Thus, the results pointed out that students’ performance of pronunciation was not as good as their knowledge of pronunciation.

When analysing in more detail the scores of the students in the POT, it was found that more than fifty per cent of students’ scores were average. In fact, although no student received the highest score (10 points), 20 out of 31 students gained scores ranging from 5 to 7.9 points (64.5%), indicating that most of them had adequate pronunciation skills. In addition, no students were in the band of 0-2.9 points, showing that every student in the class was conscious of English pronunciation. However, in spite of their awareness of English pronunciation, 11 students still could not perform well in the POT test, receiving scores between 3 and below 5. Hence, it can be suggested that there is a huge gap between students’ knowledge and performance in pronouncing allomorphs of English inflectional morphemes -s and -ed. This phenomenon was in line with the results of the study by Hoang (1999) which indicated that students still might not perform well in real-life situations despite their gaining the highest scores in the written exams.

In order to get a better understanding of this phenomenon as well as the statistical analysis of the gap, students’ mistakes have been calculated and divided into two
categories: mistakes in using -s and those in using -ed. This result is illustrated in Table 5.

Table 5: Students’ mistakes on the POT test (n=31)

<table>
<thead>
<tr>
<th>Classification</th>
<th>Number of mistakes</th>
<th>Percentage</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>-s</td>
<td>898</td>
<td>82.6</td>
<td>28.97</td>
<td>8.460</td>
</tr>
<tr>
<td>-ed</td>
<td>189</td>
<td>17.4</td>
<td>6.09</td>
<td>3.305</td>
</tr>
<tr>
<td>Total</td>
<td>1087</td>
<td>100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5 points out that the number of mistakes in using -s was very much greater than that in using -ed (898 and 189, respectively). Indeed, the percentage of -s mistakes was nearly four times higher than the percentage of -ed mistakes (82.6 per cent compared with 17.4 per cent). Additionally, the mean value of the inflectional morpheme -s was greater than that of -ed. Hence, the participants were likely to have more difficulties in using -s than -ed. This result was consistent with the findings of students’ errors in the PW that students normally made more mistakes with the inflectional morpheme -s than with -ed whether in any types of pronunciation tests. More importantly, the total number of mistakes in the oral test was nearly ten times as much as that in the written test (1087 mistakes and 125 mistakes, respectively), leading to the conclusion that despite having English pronunciation knowledge the students still had problems when practising it. One possible explanation for this was given by Aliyu (2017). The researcher stated that due to his students’ poor awareness of the morphemes, both the inflectional morphemes -ed and -s were mispronounced. It could also be observed in the current study that when processing the POT most students omitted the inflectional morphemes -ed and -s, just exactly as Hoang’s (1999) conclusion that learners were likely to fail in applying their pronunciation knowledge to real-life practice.

The current study’s result was also compatible with that of Hayashi (2008). Hayashi demonstrated that “Vietnamese students seem to have difficulty recognizing these allomorphs and tend to omit consonants and grammatical endings” (p.43). Similarly, Nguyen (1970a, 1970b), in his study, mentioned his Vietnamese participants’ omission or mispronunciation of /s/, /z/, and /iz/, which indicate a plural form suffix, and /t/, /d/, and /id/, which indicate a past tense suffix.

4.3. The Relationship between Students’ Knowledge and Their Performance in Pronouncing English Inflectional Morphemes -s and -ed

In order to determine the correlation between the results of PWT and POT, Pearson Correlation Coefficient was carried out between students’ scores of POT and PWT. The results revealed that there was no correlation between students’ scores of POT and PWT (Sig. (2-tailed) = 0.095 > 0.05). Thus, despite the phonological awareness that was highly displayed in the PWT, the phonetic performance was low. This result was incongruent with the studies by Souza (2015), and Namaziandost, Esfahani and Hashemifardnia.
(2018), both of which reported a strong relationship between learners’ phonological knowledge and their performance. Nevertheless, the finding supported Hoang’s (1999) conclusion that students might gain the highest scores in the written exams; nonetheless, this could not guarantee that they would be excellent in real-life performance.

To sum up, in spite of having English pronunciation knowledge, specifically the allomorphs of morphemes -s and -ed, the participants of this study did not have good performance in pronouncing these ones, especially when it came to real-life situations. In other words, there was certainly a gap between the students’ pronunciation knowledge and their performance. There might be a number of factors that could account for this gap. Firstly, students might lack the motivation in learning and practising pronunciation. As Gardner (2000) specified, motivation is composed of goal, desire, attitude and effort. Consequently, it can be predicted that because of the small percentage of the occurrence of pronunciation as well as the way that pronunciation is tested in the MOET’s graduation examination, pronunciation is hardly the students’ goal in learning English in high school, resulting in their having no desire for, no positive attitudes towards and no efforts taken for practising to achieve good pronunciation.

Secondly, it has been proved that Vietnamese learners of English have definite difficulties while learning a second language, especially its pronunciation, when that language’s sound system is not as near to and as simple as their own (Flege, 1980; Wu, 1993; Fatemi, Sobhani & Abolhassan, 2012). To put it another way, the subjects of this study might suffer from their L1 interference; therefore, although they acknowledged the way to correctly pronounce English morphemes -ed and -s, they were not able to make appropriate articulation when speaking. Moreover, it might be that when taking the POT, the participants were possibly tense and anxious, which could affect the results, as Dörnyei (2005) asserted.

The third factor relates to teachers’ roles. As indicated, because of the unimportant position of pronunciation in most language curricula and teachers’ lack of formal training for pronunciation teaching as well as program directions, most teachers have to prepare themselves on how to teach students pronunciation knowledge (Derwing & Rossiter, 2002; Fraser, 2004; Harmer, 2001). More importantly, in the English learning context in Vietnamese high schools, teachers usually have to follow the requirements for graduation examination; hence, they might not focus on students’ classroom pronunciation practice; rather students are asked to do paper-and-pencil tests designed in the MOET’s exam format. This is likely to lead to the gap between the pronunciation knowledge and performance of learners.

The next factor that should be mentioned is pronunciation teaching methodologies. As previously discussed, Vietnamese high school students are required to complete a national graduation examination paper in English with more focus on grammar, vocabulary, reading and writing rather than speaking and pronunciation; therefore, their teachers are to design lessons to fulfil their students’ needs. As a result, teachers opt for traditional teaching methodologies to supply students with
pronunciation knowledge (phonological awareness) instead of production (phonetic performance) (Hiep, 2005), through which students can only gain accuracy in paper-and-pencil tests, and not fluency in oral tests (Hoang, 1999; Wright, 2002). It is thus indispensable that teachers use teaching technologies appropriate and efficient to develop students’ phonological awareness and performance as well (Richard & Schmidt, 2011).

Finally, Vietnamese high school students lack a real-life environment for speaking English as well as practising pronunciation. In fact, the subjects in this case study did not have opportunities to be exposed to real-life language use with native speakers of English. Also, pronunciation practice outside the class was not encouraged enough; therefore, students did not have enough motivation to get access to numerous available resources of spoken English on the Internet. This, as Williams and Burden (1997) indicated, would affect the learning outcomes; that meant, their pronunciation performance was not as good as their pronunciation awareness.

5. Recommendations

These findings raise important recommendations for pedagogical actions as follows.

Firstly, it is possible that the students lack motivation in practising to achieve good pronunciation. For that reason, teachers should focus more on teaching pronunciation through communication such as utilising the method of Communicative Language Teaching in high school classes so that students might get involved in the learning process and set for themselves a learning goal, which will result in students’ high learning achievement (Dörnyei, 1998; Gardner, 2000; Levis, 2005; Marinova, Marshall & Snow, 2000; Shaaban, 2002). Besides, it is vital for teachers to help students recognize their pronunciation errors as well as point out the difference in English and Vietnamese phonetic pronunciation (Ha, 2005; Hayashi, 2008).

Secondly, because of the pressure for students’ to pass the National High School Graduation Examination, knowledge rather than practice is more often the focus in teaching pronunciation mainly through conventional pedagogical methodology at high schools. Accordingly, it is advisable that teachers should include extra pronunciation practice in their lessons to raise students’ interest in learning pronunciation. They can, for example, integrate pronunciation training into the lessons of reading and writing skills. Additionally, as student knowledge might be different from their performance, especially in a real-life context, testing students by using a paper-and-pencil test will not accurately reflect students’ performance. Instead, oral tests should be employed.

Thirdly, the results of the study also indicated that the participants lack a real-life environment for them to speak English and practise pronunciation. Accordingly, high schools should provide students with opportunities to practise their English with native speakers and with their friends; for instance, school boards might organize English clubs and invite English native speakers as special guests; or they might hold English Book/
Movie Clubs where students might introduce a book or a movie that they find interesting. Furthermore, teachers should encourage students to improve their pronunciation outside of class by introducing various accessible resources of spoken English on the Internet and assigning responsibilities for them to fulfill (Hayashi, 2008).

Finally, the research revealed that there was a huge gap between students’ knowledge and their performance in pronouncing allomorphs of English inflectional morphemes. By understanding those deficiencies, teachers can try to enhance their teaching techniques and decrease this gap. In more detail, instead of theorising knowledge in the textbook by using a lot of sample structures and formulas, teachers should deliver it through short videos, pedagogical clips, and pieces of music so that students would be familiar with various accents and pronunciations of foreigners. In addition, teachers should focus on students’ pronunciation by aiding and paying attention to each individual student. By doing so, students are likely to be motivated and willing to learn pronunciation and the English language as well.

6. Conclusion

In conclusion, every student in the current study had more or less awareness of English pronunciation. Furthermore, while the majority of the participants had sufficient pronunciation abilities, the English pronunciation knowledge and performance of each individual in the class varied greatly. Besides, students’ pronunciation performance was not as good as their knowledge of pronunciation. No correlation between the students’ knowledge and their performance could be observed, which means that there was a significant gap between the knowledge and performance in pronouncing allomorphs of English inflectional morphemes -s and -ed of these high school students. Numerous factors that could account for this gap have been indicated such as lack of motivation, teachers’ expertise, and lack of real-life environment, to name a few.

Conflict of Interest Statement
The authors declare no conflicts of interest.

About the Authors
Bui Minh Chau (M.A.) is currently working as an English language teacher at Can Tho University, Viet Nam. She teaches courses on Second Language Acquisition and Discourse Analysis for undergraduate students. Her research interest includes English pedagogy and teacher professional development. She can be reached at bmchau@ctu.edu.vn

Nguyen Tien Quang is a student of Can Tho University, Viet Nam. His major is English Teacher Education. He can be reached at quangb1811362@gmail.com
Minh Chau Bui, Tien Quang Nguyen
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

References


Minh Chau Bui, Tien Quang Nguyen

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