

Phonetic Transcription on Allomorphs of Past Participle Form of Regular Verbs

Ida Royani^{*1}, Awliya Rahmi²

Institut Agama Islam Negeri (IAIN) Padangsidempuan¹, UIN Imam Bonjol Padang²

e-mail: royanii381@gamil.com¹, awliyarahmi@uinib.ac.id²

Abstract This research deals with the analysis of allomorphs of past participle form of the regular verb in English. Because allomorphs are phonologically conditioned, transcribing them becomes an interesting focus to figure out using phonetic transcription provided by IPA symbols and characters. It is not only in pronunciation accuracies, English language learners are also expected to be able to transcribe as they pronounce the words. Descriptive qualitative was used to study participants at fifth semester, English Education Majoring of IAIN Padangsidempuan. They were randomly selected to provide data. Collecting data was established by interviewing and taking notes. The finding revealed that correct transcription occurred 69% of the total words and mostly appeared to the allomorph [id] such as [priventid], [kələktid], [dipəndid] and [ləndid]. By dealing with responses, it was confirmed that a large number of participants argued to apply rule provided by morphophonemic context to get accurate transcription.

Keywords: Allomorph, Morphophonemic, Past Participle Form, Phonetic Transcription, Phonological Rule.

Abstrak Penelitian ini merupakan analisis alomorf dari bentuk past participle kata kerja regular dalam bahasa Inggris. Dikarenakan alomorf secara fonologi merupakan fenomena yang dapat dikondisikan, maka mentranskripsinya merupakan hal yang menarik untuk ditelusuri menggunakan transkripsi fonetik simbol dan karakter yang ada pada International Phonetic Alphabet (IPA). Tidak hanya ketepatan pengucapan, pebelajar bahasa Inggris juga diharapkan mampu mentranskripsi kata sebagaimana mereka mengucapkannya. Kualitatif deskripsi digunakan untuk mempelajari partisipan, yakni mahasiswa semester lima, Jurusan Tadris Bahasa Inggris IAIN Padangsidempuan, yang dipilih menggunakan random sampling sebagai sumber data. Pengumpulan data dilakukan dengan wawancara dan catatan. Hasil penelitian menunjukkan bahwa transkripsi partisipan benar sebanyak 69% dari total kata yang dikerjakan dan kebanyakan muncul pada alomorf [id] seperti [priventid], [kələktid], [dipəndid] dan [ləndid]. Berdasar pada respon partisipan saat wawancara, ditemukan bahwa sebagian besar mereka menggunakan teori fonologis dalam konteks morfofonemik untuk mendapatkan transkripsi yang benar.

Keywords: Allomorph, Morphophonemic, Past Participle Form, Phonetic Transcription, Phonological Rule.

INTRODUCTION

Transcribing realization of words could be hardly exposed to learners because English has a distinction in pronouncing the words from its spelling as found in the past participle form of regular verbs in English. The word *claimed*, for instance, could be realized as [kleimed], or [kleim]. Learners confirmed that they realized -ed with unclear sound which can not be seen in transcription. This misunderstanding of the phoneme and alphabet will lead learners to have wrong transcription of any allomorphic words above which are ruled phonologically and transcribed clearly by phonetic transcription.

This problematic phenomenon granted lecturer to view how learners are actually transcribing the words using phonetic transcription, especially to the verbs ending with -ed in spelling known as allomorph. Because phonetic transcription is one of the ways to look at the realization of the words phonologically, besides practicing, therefore; as a lecturer of English phonology class, the researcher was interested to figure out learners' transcription to the -ed allomorph and their accuracy. The research questions are as follows. (1) How do students transcribe -ed allomorphs of past participle form of regular verbs using phonetic transcription? (2) To what extent do students correctly transcribe -ed allomorphs of past participle form of verbs as it is realized?

This research aims at figuring out how students transcribe allomorphs of past participle form of regular verbs -ed using phonetic transcription and describing to what extent students' transcriptions are correct as it is realized. By knowing the way learners transcribe the allomorph and their accuracy frequency, learners will understand that what they realized actually can be presented by phonetic transcription, including the phonological system of allomorph -ed.

In conducting this research, several theories are used as references. Ball and Müller (2002) stated that phonetics is part of the speech and language sciences which figures out the human speech production and perception systems. Moreover, Trask (1996: 183) stated that an alphabetic notation, transcription, symbols and neutral realization of each variety of sound universally is visualized by International Phonetic Alphabet (IPA), frequently form as a chart. It is to provide visually distinctive symbols for all speech sounds which are phonologically distinct in any language; preferring to keep the use of diacritics to an irreducible minimum, it has introduced a large number of specially designed characters.

McMahon (2002) depicts that utterances can be transcribed by working deductively from general to specific, from speech production to rule-governed, and from utterance to segment system by means of IPA chart. Moreover, phonological components are permissible to be valued by phonetic account (Chang: 2010). As a result, it is possible to employ phonetic elements fill exactly in phonological representation. Specific pattern that languages have, revealed inductive

establishment, so that acquisition of it should be an obligatory (Arvaniti: 2007). Briefly Collin (2003) noted on his book that most frequently happen to native speakers are surprised and unaware of the way how speeches are operating when utterances are transcribed using detail and specific forms of notation.

Modifying a variety of phonemes with supra-segmental phonology series will sufficiently be transferred into notation provided by IPA. Sequences probably grammatical morpheme *-ed* found in the past participle form of regular verbs in English. The verbs are formed by adding inflectional morpheme *-ed* to the infinitive verb in all grammatical persons, singular and plural (Davila, 2018). The realization of morpheme into a system of notation is varied based on the environment it occurs. Phonetic transcription of the morpheme refers to morphophonemic phenomena where the phone of the morpheme is transcribed using phonetic symbols provided by IPA. These variants are called allomorph (Mc Mahon, 2002; Fromkin, 2011; Roach, 2009; Collin, 2003).

The variants of allomorph *-ed* have been noticed by three different realizations which symbolized in phonetic transcription shown by IPA as [t], [d], [ɪd]. These three phonological realizations of the *-ed* inflectional morpheme are determined by phonological rules. In detail, allomorph [t] is used to transcribe *-ed* morpheme when the verbs are ending with voiceless sound. In other words, [t] is written in the transcription following voiceless phoneme. Whereas allomorph [d] is used to transcribe *-ed* morpheme when the verbs are preceded by voiced sounds, including consonants and all vowels. Another allomorph [ɪd] or sometimes transcribed as [əɪd] is used to transcribe *-ed* morpheme when the verbs are preceded by alveolar stop consonant; [t] and [d] (Danner, 2015; Aliyu, 2017; Davila, 2018; Ahmed, 2018; Yaowaratana, 2018). Following table figures out the morphophonemic phenomena and example.

Table 1
Allomorph *-ed* and environment

| Allomorph of <i>-ed</i> | Environment/ phonological rule | Example | Phoneme |
|-------------------------|--|---|--|
| [t] | When preceded by a voiceless sound | helped, asked, guessed, sniffed, brushed, watch, etc. | [p], [k], [s], [f],[ʃ], [θ]and [tʃ]. |
| [d] | When preceded by voiced sounds (consonants and vowels) | absorbed, beg, sneezed, love, judge, screamed, moaned, thanked, trembled, steered, chewed, played, tired, cried, agreed, etc. | [b], [g], [z], [v], [ʒ], [dʒ], [m], [n], [ŋ], [l], [r], [w], [j], [ə], [ɪ], [ʊ], [e], [ʌ], [æ], [ɒ], [ɜ:], [ɔ:], [ɑ:], [ɔɪ], [aɪ], [əʊ], [aʊ], [ɪə], [eə], |

Table 1

| | | [eɪ] |
|------|--|--|
| [ɪd] | When preceded by alveolar stop consonants (/t/ and /d/ | wanted, graded, [t] and [d] accepted, admitted, needed, etc |

It is necessary to extensively read related studies in the area of allomorphic realization whether in practice or transcription. The study conducted by Aliyu (2017) which was focusing on the use of morpheme *-ed* by English secondary high school in Nigeria. The study revealed that most of the participants did not pronounce the allomorph *-ed*, and even they had pronunciation, they realized wrongly. It leads to understand that the learners were not paying attention to the inflectional morpheme *-ed* of regular verbs when they were pronouncing the words. Obviously, when the allomorph *-ed* was orally realized, the learners were in false case. The researcher then was interested to investigate the reason why the learners did as the way they realized allomorph *-ed*. Based on the participants' rationale, it was originated from their unawareness of the morpheme which is phonologically conditioned. This response was surprisingly to the notion of pronunciation practice which is suggested to perform intelligible realizations of any speech rule governed on phonology orally. According to this finding, the present study is interesting to investigate the realization of allomorph *-ed* in case of the allomorph transcription as a form of viewing pronunciation on paper.

Moreover, Ahmed (2015) studied the phonetic use of the allomorphic variations of the past [+ed] and plural [+s] morphemes, the present study just illustrated sufficiently to the *-ed* morpheme which forward contributed as a means of comparison to the later discussion. It was found that the majority of the subjects failed to use the allomorphic variations [t] and [ɪd] in different phonetic environments, substituted the latter allomorphs with the allomorph [d], and erroneously generalized the allomorph [d] to the adjectives that end in *ed*. This result might be relevant to what had been revealed by previous study above because of being error using the variants of allomorph which was performed by [d] generally.

In addition, across proficiency levels, Davila (2018) studied the production accuracy of allomorph [t], [d] and [ɪd]. The study revealed that the more advanced English learners, the higher pronunciation accuracy on the production of the allomorphs, [t] and [d]. it differs to the allomorph [əd] or [ɪd] which had no significant differences found among proficiency levels. It can be tacit to argue that the more proficient the speaker, the more accurate allomorph is produced. Implicitly, it can be stated that the mastery of language use specifically to the phonological rule will create an appropriate selection to the speakers on what allomorph realization is suitable to

any different environment the words have. Therefore, the proficiency level can be influential to the realization of the allomorph.

In addition, a potential factor to be accurate in realizing allomorph was also studied by Yaowaratana (2018) to the Thai EFL students. The study investigated students' perceptions on the English regular past tense verbs and strategies to use *-ed* allomorph. The study revealed that ability to perceive the *-ed* ending sounds was significantly high, especially to students with higher education level. It was also supported by their strategies to use allomorphic variants which were classified as cognitive strategy such as listening to song, watching any kinds of English entertainment via radio and affective strategy such as encouraging themselves to work on pronouncing difficult words or feeling dislike to learn.

Another research, Lotfie (2017) studied the Malay speakers' pronunciation of the English language *-ed* allomorphs [d], [t] and [ɪd]/[əd]. Finding revealed that the Malay users tended to pronounce forms preceded by [t] and [d] as /əd/, i.e. with a schwa. It is also generally observed that the allomorph /d/ was utilized regardless whether *-ed* has voiceless, vowel or voiced preceding sounds. Also, the participants consistently dropped the *-ed* allomorphs where required. This study was quite contradictory to the previous studies above. The participants were aware of allomorph and their consciousness brought about realization accuracy which was trust to be correct not only in pronunciation but also in transcription.

METHOD

This research is descriptive qualitative. The focus is on the phonetic transcription of the allomorph *-ed* in three categories; [t], [d], and [ɪd] and describing the transcription accuracy. The research was carried out after finishing the phonology class at English Education Majoring of IAIN Padangsidempuan. The time is suitable for conducting research when students had already finished studying phonetic transcription in class. The participants were ten (10) students, selected to participate in the study and drawn from the classes separated in three different classes, Tadris Bahasa Inggris (TBI) 1, 2, and 3 of the fifth semester. Random sampling technique was used where all the members were given an equal chance of being selected.

The data were collected through interview and note-taking. List of regular verbs was taken from <https://cla.univr.it> which contains more than two hundreds regular verbs in American English and those were given to every participant and ordered to transcribe at least ten words. After transcribing process was done and checked to pursue the accuracy of transcription, interviewing participants was established by recording and taking notes to get information how they transcribed *-ed* allomorph. Their responses were analyzed by qualitative description dealt with Gay and Airasian (1996). The gathered data i.e. transcription results and interview transcripts

were managed to be read. After reading intensively, the data were described based on what had been experienced while collecting data. When the data finished to be classified into smaller unit with description, this categorization was interpreted accurately based on the fact in distance to the researcher's assumptions and biases.

RESULT AND DISCUSSION

Based on the participants' results, there 84 words were transcribed. Those accuracies were verified by dealing with the idea that variants of allomorph, -ed is realized in three different transcriptions; [t], [d], and [id]. In accordance with this statement, in this research, transcription accuracy was checked and students were requested to explain how they transcribed in order to supply the answer to the research questions.

1. Transcription of Allomorph -ed

The first to be discussed is the allomorph transcription accuracy. Participants had transcribed correctly 58 words which contributed 69% portion of total verbs. While incorrect transcription was found in 26 verbs which were assumed by 31% to the total percentage. The following chart shows the percentage of correct and incorrect transcription by participants.

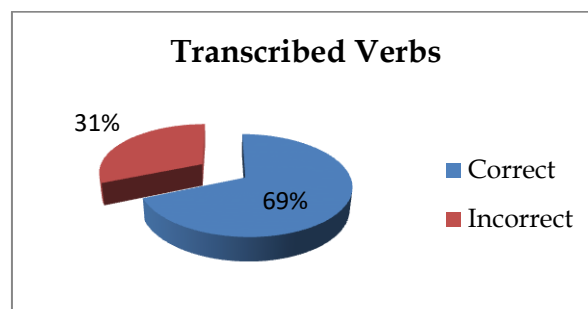


Figure 1. Percentage of Transcription Correctness

In detail, participants' transcription accuracy were revealed in all allomorph categories; [t], [d] and [id]. Most of the correct transcription was found in allomorph [id] which almost accurate in amount of 22 verbs. Unfortunately, there were only two words incorrect; verbs *divided* and *knitted*. Those were contributed to the largest portion of accuracy percentage in 92% of the total. Similarly, this category was also pointed the lowest segment of total accuracy percentage with only providing 8% inaccuracy.

Another allomorph, [t] was transcribed accurately in 25 verbs which contributed 81% of the total percentage. Those were substituted slightly below 20% of the incorrect transcription of allomorph [t] found in 6 verbs. Contradictory to allomorph [id], there was [d] transcription contributing the largest inaccurate transcription where approximately below 35% of the total

verbs were wrongly written. That made 66% of the verbs correctly transcribed. The participants' accuracy based on allomorph as seen in the following table.

Table 2
Participant' Accuracy based on Allomorph Transcribed

| Allomorph | Total verbs transcribed | Correct | Incorrect |
|-----------|-------------------------|----------|-----------|
| [t] | 31 verbs | 25 verbs | 6 verbs |
| [d] | 29 verbs | 19 verbs | 10 verbs |
| [id] | 24 verbs | 22 verbs | 2 verbs |

Briefly, figuring percentages of those labels, the following chart presents correct and incorrect transcription in three allomorphs.

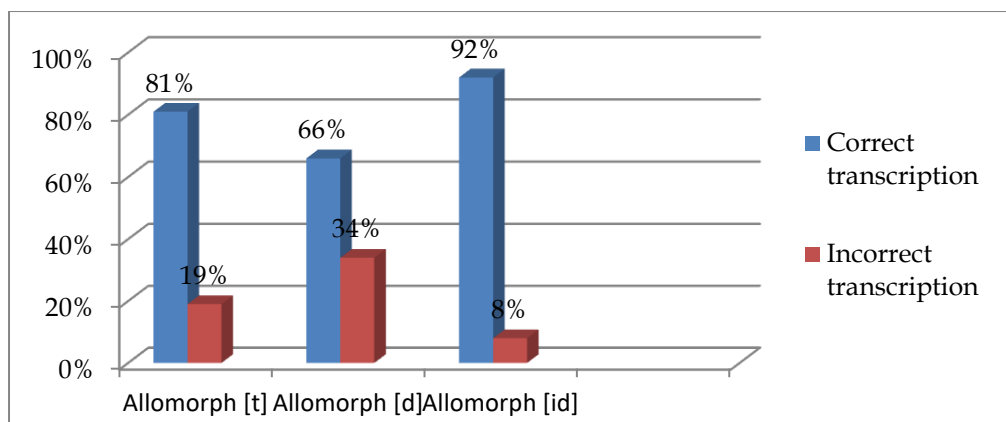


Figure 2. Percentage of Allomorph Transcription

2. Transcribing allomorph[t]

Based on participants' works, [t] was used in 31 words. According to the rule, [t] is obligated to transcribe only for ending phoneme with voiceless consonants, i.e. when preceded by non-voiced sounds. However, transcriptions revealed by participants were found in two other different environments; ending phoneme with vowels and voiced consonants.

Accurate transcription of allomorph [t] was found to the verbs in the environment when the ending of phoneme was voiceless consonants, presented by sounds [p], [k], [s], [f], and [ʃ] as follows.

Table 3
Transcription of Allomorph [t]

| [p] | [k] | [s] | [f] | [ʃ] |
|--------|--------|--------|---------|---------|
| [wɪpt] | [ʌskt] | [mɪst] | [snɪft] | [brʌʃt] |

Incorrectly, allomorph [t] was transcribed to the words ending with vowels and voiced consonants. Allomorph [t] had been found preceded by vowel sounds such as [eɪ] and [ɪ] and ending with voiced phonemes such as [dʒ], [n], [m], and [l]. Examples can be seen in the following.

Table 4
Transcription of Allomorph [t]

| [eɪ] | Instead of | Words |
|------------|------------|----------|
| [neɪt] | [nɪtɪd] | knitted |
| [ɪ] | | |
| [wʌrɪt] | [wʌrɪd] | worried |
| [dʒ] | | |
| [dæmædʒt] | [dæmædʒd] | damaged |
| [n] | | |
| [məʊnt] | [məʊnd] | moaned |
| [m] | | |
| [ɪnfɔːrmt] | [ɪnfɔːrmd] | informed |
| [l] | | |
| [treɪblt] | [treɪblɪd] | trembled |

However, words, ending vowel sounds, for instance, the word *knitted* was transcribed [neɪt] and *worried* was transcribed [wɔːrɪt]. It had been clarified that they were transcribed intentionally. Based on the participants, the vowels were believed as voiced phoneme, so [t] allomorph was perceived as appropriate allomorph for ending voiced phoneme words. Logically, it can be seen that participants' recognition to the rule is considerable, even though they have less remembrance to apply rule in which governed that [t] is for voiceless not voiced ending phoneme words.

Another environment was also found where the [t] allomorph was transcribed on the words ending voiced phonemes. Cases appeared to the words *damaged*, *moaned*, *informed*, and *called*. It had been confirmed that those were transcribed by participants intentionally, however for some students that was miswriting and potential to be correct if it might be time to rewrite.

3. Transcribing allomorph[d]

Based on participants' works, [d] was used in 29 words. According to the rule, [d] is obligated to transcribe only for ending phoneme with voiced sounds; i.e. when preceded by voiced consonants and all vowels. However, transcriptions revealed by participants were found in ending phoneme with voiceless consonant environment.

Accurate transcription of allomorph [d] was found to the verbs in the environment when the ending phoneme was voiced consonants presented by [dʒ], [n], [ŋ], [l], [r] and vowels presented by sounds [ɪ], [i:] [ʊ],[əʊ], [aɪ], and [eɪ].

Table 5
Transcribing Allomorph [d]

| [dʒ] | [n] | [ŋ] | [l] | [r] |
|------------|----------|----------|---------|--------|
| [æreɪndʒd] | [bænd] | [θæŋd] | [seɪld] | [bærd] |
| [ɪ] | [i:] | [əʊ] | [aɪ] | [eɪ] |
| [kɒpɪd] | [ægri:d] | [ælləʊd] | [kraɪd] | [pɪed] |

Incorrectly, allomorph [d] was transcribed to the words ending with voiceless consonants. Allomorph [d] had been found preceded by voiceless sound such as [k] examples can be seen in the following compared with the accurate transcription.

Table 6
Transcribing Allomorph [d]

| [k] | Instead of | Words |
|----------|------------|--------|
| [tɔ:kɪd] | [tɔ:kt] | talked |
| [ɑ:skɪd] | [ɑ:skt] | asked |
| [wɔ:kɪd] | [wɔ:kt] | walked |

However, words ending voiceless consonant sound [k], for instance, the words *talked*, *asked*, and *walked* were transcribed using allomorph [d] instead of [t]. It had been clarified that they were transcribed unintentionally. Based on the participants, allomorph -ed that preceded by voiceless consonants were believed to be transcribed as [t]. That was a confusing statement however. Participants knew the rule of allomorph [d] was used to the words ending with voiced consonants and vowels sounds, but for the three words, unfortunately there was lack of remembrance. It had only happened to an individual person of the participants, so it can not be generalized as the way of transcription. It was also confirmed that it was not transcribed deliberately. As a result, the words could be rewritten correctly before stating the phonological rules of allomorph [d].

4. Transcribing allomorph[id]

Based on the participants' works, [id] was used in 24 words. According to the rule, [id] is obligated to transcribe only for ending phoneme with alveolar stop consonants; [t] and [d] sounds. However, transcriptions revealed by participants were found in two other environments; ending phoneme with voiced and voiceless consonant sounds.

Accurate transcription of allomorph [id] was found to the verbs in the environment when the ending phonemes were alveolar stop consonants presented by [t] and [d]. Some examples of transcription are viewed in the following.

Table 7
Transcribing Allomorph [d]

| [t] | [d] |
|-------------|------------|
| [priventid] | [æfɔ:did] |
| [æksəptid] | [ædid] |
| [heitid] | [ləndid] |
| [visitid] | [dipəndid] |
| [dʌstid] | [endid] |
| [kələktid] | [ətəndid] |
| [indʒektid] | [ni:did] |

Incorrectly, allomorph [id] was transcribed to the words ending with voiced and voiceless consonants. Allomorph [id] had been found preceded by voiced and voiceless sound such as [r], [s], [m], and [k]. The examples can be seen in the following compared with the accurate transcription.

Table 8
Transcribing Allomorph [d]

| [r] | Instead of | Words |
|--------------|-------------|------------|
| [diskɔvərəd] | [diskɔvərd] | discovered |
| [s] | | |
| [gesid] | [gest] | guessed |
| [m] | | |
| [kleɪmid] | [kleɪmd] | claimed |
| [k] | | |
| [kikid] | [kikt] | kicked |

However, words ending voiced consonants [r] and [m] for instance, the word *discovered* and *claimed* were transcribed using allomorph [id] instead of [d]. It had been clarified that they were transcribed intentionally. Based on the participants, allomorph -ed preceded by voiced consonants for both words were believed to be transcribed as [id] as like they were pronouncing them before transcribing. It was considered that participants were realized to make [id] because of their pronunciation. Unfortunately, the pronunciation they performed was lack of mastery and

accuracy. Even though the way of transcribing inductively was done and the language was used normally, the abstract feature of every single phoneme was still necessary to recognize by speakers.

Another case has happened to the words ending with voiceless consonants [s] and [k]. This environment was found where the [id] allomorph was transcribed on the words *guessed*, and *kicked*. It had been confirmed that initiative helped them to transcribe by recognizing rules and believed that it would be accurate. However, their transcription was incorrect and let them mistake for unrealized false.

5. Realization of Accurate and Inaccurate Transcription

It had been revealed through interviewing that participants back up their claims to reasonably verify their transcription. Overall, participants transcribed allomorph -ed in three different ways, [t], [d], and [id] in accordance with phonological rule governed by the morphophonemic and depicted researcher to logically perceived those transcriptions as an acceptable result. The reasons to decide results in transcription were phonological rules, words pronunciation, and other undefined reasons such as unfamiliar words and unconsciousness.

a. Phonological Rules in Morphophonemic Accuracy

In accordance with to the interview responses, most of the participants argued that rules in the morphophonemic were the basic idea to transcribe allomorph -ed into [t], [d], and [id]. Only a small number of them referred to another way of transcribing however. In fact, participants were found approximately correct to all the words they transcribed and mostly found in transcribing verbs ending with alveolar stop consonants /t/ and /d/. Also, allomorph [t] and [d] had been transcribed accurately by recognition of the rule in which [t] and [d] are transcribed when preceded by voiceless and voiced sounds respectively. However, inaccurate transcription was found to several participants who misplaced the rule to create transcription [t] allomorph for voiced consonant such as *walked*, *asked*, and *talked* and [d] for ending voiceless consonant phoneme occurred to words *damaged*, *trembled*, *worried*, *moaned*, *planned*, *called*, *timed*, and *informed*.

b. Words Pronunciation

Based on the interview responses, there was only small number of participants transcribed correctly by pronouncing words before transcribing. According to them, the way they transcribed was established by making the decision what exactly the sounds they pronounce. Then it would be noted and characterized as they listened to their pronunciation. This appeared not only to single allomorph but also to all types of allomorph transcription. For instance, the words were *faced*, *called*, and *heated* which were transcribed by allomorph [t], [d], and [id] correctly.

On the other hand, pronunciation before transcribing brought about incorrect allomorph transcription. The case appeared to uncertain phonetic feature of the ending phoneme, whether it belonged to voiced or voiceless consonants. If the participants did not distinguish such feature, the transcription to the preceded consonants would become incorrect. It occurred three times to three different participants where the word *damaged* was transcribed by [t] allomorph instead of [d] because of phoneme /dʒ/.

c. Others

Based on the interview responses, a number of participants argued that unfamiliar words found in the list were transcribed as what they intended to write. Actually, participants were asked to transcribe some unfamiliar words to them. It was motivated to explore their recognition to the rule whether they had correct transcription despite not knowing meaning and pronunciation of the words. In fact, some of them stated that it was inaccuracy only to unfamiliar words and some of them were not. For instance, the word *stuffed* was transcribed accurately without problem by allomorph [t] even it was unfamiliar. However, there were contradictory to the words *timed*, *thanked*, and *trembled*. Those were unfamiliar to several participants and occurred to inaccurate transcription.

Besides, there was also unconsciousness of the participants in transcribing the words. Some of them forgot to transcribe allomorph [d] to voiced ending phoneme such as word *informed* was transcribed by [t]. It was caused by lack of remembrance to the phoneme /m/ following -ed which must be transcribed using [d]. It was revealed that it was unrealistic jot down and possible to be correct when it was provided to rewrite.

Based on the result above, several previous studies presented as related literature should be discussed with the present study. The result study conducted by Aliyu (2017) revealed that most of participants did not pronounce the allomorph -ed, and even they had pronunciation, they realized wrongly. Also, it was originated from the participants' unaware of morpheme which are phonologically conditioned. This was quite distinct to this present study where all participants, in spite of transcribing not pronouncing, realized the allomorph in all forms; [t], [d] and [id]. Similarly, the participants were aware of morphophonemic which are phonologically conditioned. Even they had been found unconsciously transcribing wrongly, they had depicted to be able to rewrite correctly when their results was finished checking.

In addition, despite contradictory to finding revealed by Ahmed (2015), in term of incorrect use of the allomorphic variations [t] and [id] in different phonetic environments, the present study also finds similar error generalized to the allomorph [d] which is found covering inaccuracies slightly below 35%. Regardless, Lotfie (2018) revealed that [d] was generally used by Malay speakers whether correct or incorrect utilization. This is quite interesting to state that [d] is

effortful allomorph to realize. There is no evidence to the present study how the allomorph [d] is incorrectly transcribed. However, the phonological rule affects the transcriptions made by the learners, and sometimes sound /d/ is difficult to pronounce clearly which formulates allomorph [t] appears to the participants' mind as intelligible realization of allomorph *-ed*.

Moreover, Davila (2018) claimed that the more advanced learners the higher frequency the allomorph [t] and [d] are accurate. While [əd] or [id] allomorph no significant differences were found among proficiency levels. It can be assumed that speakers who produced allomorph [t] and [d] should be proficient to the rule, which producing [id] allomorph should not be. It is then inclusively understood that the large percentage of the allomorph [id] correctness in this present study is caused by easiness of phonological rule to remember. The learners' mastery on the phonological rule is also assisted by finishing their phonology class throughout a semester which is viewed as potential factor to be proficient on the rule. Differently, Yaowaratana (2018) added some strategies revealed to be familiar to the words using allomorph *-ed* such as cognitive and affective strategies.

CONCLUSION

Based on the result and discussion above, it is concluded that correct transcription was revealed 69% of the total words transcribed. Allomorph [id] contributed accuracies 92%, allomorph [t] 81% and allomorph [d] 66%. While inaccuracies occurred 34% transcribing allomorph [d], 19% allomorph [t] and only a little wrong in transcribing allomorph [id]. Transcription of allomorph [t] was found correctly to the words based on the phonological rule such as sounds [p], [k], [s], [f], and [ʃ]. However, wrong transcription was also found to the words ending with sounds [dʒ], [n], [m], and [l]. Additionally, transcription of allomorph [d] was found correctly to the words based on the phonological rule such as sounds [dʒ], [n], [ŋ], [l], [r], [ɪ], [i:], [ʊ], [əʊ], [aɪ], and [eɪ]. However, the wrong transcription was also found to the words ending with sound [k]. Another, transcription of allomorph [id] was found correctly to the words based on the phonological rule such as sounds [t] and [d]. However, the wrong transcription was also found to the words ending with sounds [r], [s], [m], and [k].

Moreover, participants transcribed allomorph *-ed* in three different ways, [t], [d], and [id] in accordance with phonological rule governed by morphophonemic. The reasons to decide resulted transcription were revealed based on phonological rules, words pronunciation, and other undefined reasons such as unfamiliar words and unconsciousness. After analyzing allomorph *-ed* of the past participle form of regular verbs transcribed by English students, it is known that phonetic transcription accuracy can be guaranteed by understanding phonological rules and practicing pronunciation more and more to various regular verb vocabularies. Also, it is hoped

that this research can be a benefit for teachers teaching phonology and pronunciation to help students improve their pronunciation accuracy and theories of phonological rules.

REFERENCES

- Ahmed, S. *Moroccan University Students' Use of the English Regular Past and Plural Allomorphic Variations*. Arab World English Journal (AWEJ) Vol.6. No.3 September 2015 Pp. 157 – 165
- Aliyu, Muhammad M. *International Journal of English Research. Use of Grammatical Morphemes -ed and -s in the Spoken English of Secondary School Students*. Volume 3; Issue 1; 2017; Pg 62-65
- Arvaniti, Amalia. *On the Relationship between Phonology and Phonetics (or why phonetics is not phonology)*. Saarbrücken, 6-10 August 2007.
- Ball, Martin J. and Nicole Müller. *The Use of the Terms Phonetics and Phonology in the Description of Disordered Speech*. Advances in Speech-Language Pathology. Volume 4, Number 2, 2002. pp. 95-108.
- Chang, Woohyeok. *On the Relation between Phonetics and Phonology*. Linguistic Research. 29 (1), 2010. pp. 127-156.
- Collins, B. & Mees, I. M., (2003). *Practical phonetics and phonology: A resource book for students*. London: Routledge
- Davila A.M. *Pronunciation Acquisition of the Inflectional Morpheme – ed in English by Nicaraguan Spanish Speakers*. Open Science Journal Vol. 3, No. (1), 2018
- Danner, S, G. (2015). *Selectional Effects in Allomorph Competition*. Proceedings of AMP 2014.
- Fromkin, Victoria, et.al. (2011). *An Introduction to Language*. Ninth Edition. Canada: Wadsworth Cengage Learning
- Gay, L.R and Peter Airsian. *Educational Research*. New Jersey: Prentice Hall
- Lotfie, M.M, *-Ed allomorphs and Linguistic Knowledge of Malay Speakers of English: A Descriptive and Correlational Study*. Indonesian Journal of Applied Linguistics, Vol. 7 No. 2, September 2017, pp. 445-454
- McMahon, April . (2002). *An Introduction to English Phonology*. Edinburgh: Edinburgh University Press
- Roach, Peter. (2009). *English Phonetics and Phonology: A Practical Course*. Fourth edition. UK: Cambridge University Press.
- Trask, R.L. (1996). *A Dictionary of Phonetics and Phonology*. London: Routledge
- Yaowaratana, K. *How Thai EFL Learners Deal With English Regular Past Forms: A Case Study of a Speech Sound Perspective*. English Language Teaching; Vol. 11, No. 7, 2018.