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## **Error Analysis in Pronouncing English Vowels of the Eleventh Grade Students in One of Senior High Schools in Sukoharjo**

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### **Abstract**

Pronunciation is essential for effective communication. The incoherent pronunciation can lead to misunderstanding in communication. This research was aimed to investigate the errors made by the students in pronouncing English vowels and the factors that underlie the errors by using error analysis. This research was qualitative descriptive research, and 15 students were involved as the participants. The data were collected through pronunciation tests and interviews. The results indicated that students made 615 total errors in pronouncing English vowels which included diphthong (46.02%), short vowels (38.21%), and long vowels (15.77%). Besides, it was found that /ʊə/, /ɪ/, /eɪ/, /ʌ/, and /ə/ were the most frequently mispronounced sounds. The main factors causing students' errors were intralingual transfer and interlingual transfer.

Keywords: Error Analysis, Factors of Pronunciation Error, Pronunciation, Vowels

### **INTRODUCTION**

People and language cannot be separated nowadays. People use language to communicate with others in their daily lives, and English is one of the most widely spoken languages in the world. Communication means to understand and be understood, and understanding occurs when people can pronounce words correctly. That is why pronunciation plays a crucial role in communication. Pronunciation is widely recognized as the first and most crucial thing native speakers notice during a conversation. Knowing grammar and vocabulary is essential, but it is useless if the speaker cannot correctly pronounce those structures or words (Singh, 2017). Pronunciation is the way to produce sounds and processes of achieving meaning by the sound of speech to be understood (Kristina et al., 2006). Learning pronunciation is aimed to enable students to communicate with others, and communicative efficiency can be guaranteed by correct pronunciation. On the other hand, incorrect pronunciation can lead to misunderstanding because the

meaning or messages you want to convey cannot be delivered well. As a result, it is more likely to advocate for pronunciation to be addressed at the start of the English lesson.

This research focuses on the students' pronunciation errors. Pronunciation seems to be one of the problematic aspects of learning English, especially in countries where English is their foreign language. Gilakjani (2011) stated although students have known English for years, they still have significant difficulties dealing with pronunciation, especially for second language learners. As in Indonesia, students have been learning English for about six years, but they still make some errors in pronouncing words. One of the common errors is in pronouncing the English vowels. Therefore, this research aimed to determine what errors the students made in pronouncing English vowels and the factors that underlie the errors. This research used error analysis to identify the students' errors in pronouncing English vowels. Error analysis is the study of second and foreign language learners' errors (Richards et al., 2010).

In the last decade, several researchers have reported research about pronunciation errors. For instance, Dost in 2017 investigated pronunciation problems of high school EFL students. He found that students made some pronunciation errors in consonants and vowels. Besides, other research was done by Ercan in 2018, who studied pronunciation problems of Turkish EFL learners. The findings showed that students have difficulties in pronouncing certain English consonants (/w/, /v/, /ŋ/) and some English vowels (/ɪ/, /ɔ:/). Adila and Refnaldi in 2019 also studied pronunciation errors made by senior high school students. They found that students still made errors in pronouncing English consonants, and mother tongue interference is the main cause of the errors. Similarly, research about students' pronunciation errors on English diphthong was conducted by Saadah and Ardi in 2020. The results indicated that diphthong /ʊə/ is the most difficult sound mispronounced by the students, and the mother tongue's influence was the main cause of the errors made by students. Again, Visoni and Marlina (2020) researched students' pronunciation errors on vowels in spoken English activities (speech) class. They found that /æ/, /i:/, /ə/, /əʊ/, and /eɪ/ were the most frequently mispronounced sounds made by students.

Regardless of those previous studies about pronunciation errors, this present research focuses on pronunciation errors of English vowels made by the secondary level students in Indonesia. Moreover, this research used an online tool, WhatsApp, to collect the data instead of recording their voices in their classrooms like what is commonly done by other researchers. This study sought to investigate and answer the following research question:

1. What errors are made by the students in pronouncing English vowels?
2. What factors are underlying the students' errors in pronouncing English vowels?

## LITERATURE REVIEW

### Error Analysis

#### *Definition of Error Analysis*

Error analysis was defined by Crystal (1987) as a method for identifying, classify, and systematically interpret the unacceptable forms produced by foreign language

learners, using any of the linguistic principles and procedures. Brown (1980) defined error analysis as the process of observing, analyzing, and categorizing the second language rules' deviations and then revealing the systems operated by learners. Furthermore, Khansir (2012) states that error analysis is a type of linguistic analysis that focuses on the errors made by learners, which includes collation between the target language and errors made in the target language itself.

### ***The Difference Between Error and Mistake***

Richards et al. (2010) mentioned that error is a linguistic item used so that the native speaker of the language considers it as insufficient learning because the learners do not know what is correct. Therefore, they cannot correct it by themselves. In Addition, Norrish (1983) states that a mistake is an inconsistent deviation in which the learner sometimes gets it right but sometimes gets it wrong. As a result, it is possible to conclude that the distinction between an error and a mistake is that an error refers to a systematic deviation made by students, which happens repeatedly. Therefore, they cannot correct it by themselves. Meanwhile, a mistake is a non-systematic deviation caused by lack of attention, and students can still correct it.

### ***Steps in Error Analysis***

Ellis (1997) proposes five steps of EA: 1) gathering a sample of learner language, 2) identifying errors, 3) describing errors, 4) explaining errors, and 5) evaluating errors.

### **Pronunciation**

Pronunciation is defined by Kristina et al. (2006) as "the act or manner of pronouncing words, the utterance of speech.". Therefore, pronunciation is the way to speak to others to be understood. Moreover, according to Dalton and Seidholfer (1994), pronunciation means creating and interpreting the meaningful sounds of a particular language to achieve meaning in the use of language.

### **Vowels**

Richards and Smith (2002) define a vowel as a speech sound produced without the significant constriction of the air flowing through the mouth. Fasold (2006) declares there are twenty vocalic phonemes, made up of the following vowels or vowels glides 7 short / ɪ, e, æ, ʊ, ʌ, ə /, 5 long / i:, u:, a:, ɔ:, ɜ: /, and 8 diphthongs; / eɪ, aɪ, ɔɪ, əʊ, aʊ, ɪə, eə, ʊə /.

According to the literature review, it can be seen that error analysis, pronunciation, and vowels are related to each other. Error analysis can analyze the students' errors by using some steps; collecting the sample, identifying, describing, explaining, and evaluating the errors. The errors can be found in pronunciation. Pronunciation can be defined as the way to speak or to pronounce words to achieve meaning and be understood. One of the common errors is in pronouncing the English vowels. The errors might be caused by the vowel difference between English and Bahasa Indonesia. In this research, error analysis was used to identify the errors made by students in pronouncing English vowels.

## **RESEARCH METHOD**

This research employed descriptive qualitative research and involved 15 students as the participants. Descriptive qualitative research was chosen as an effective method of

describing and explaining errors in this research. The data sources in this research were the students' recordings when doing pronunciation tests and interviews. The data were collected through pronunciation tests and interviews with the students also the teacher. Therefore, the data in this research were from the students' pronunciation tests transcriptions and the interview transcript about the factors that cause the errors.

The researcher conducted pronunciation tests and asked the students to read and record them. Then the researcher transcribed the students' recordings to know the errors. The next step was counting the students' errors into a percentage using the formula stated by Levin and Fox (in Sugiatur, 2007). Next, the total number of pronunciation errors was divided by the total of all pronunciation errors multiplied by 100. The students who made more errors in pronouncing vowels were then interviewed. Finally, the interview was done to investigate the factors that cause the errors.

## FINDINGS AND DISCUSSION

### Research Findings

#### *Students' Errors*

The findings revealed that students made 615 errors in pronouncing English vowels. From all of those errors, it was found that diphthongs reach the highest percentage of errors made by students. The following table shows the percentage of errors based on the segmental features.

Table 1 *The Errors Based on the Segmental Features*

Segmental Features		Number of Errors	Percentage (%)
Vowels	Short	235	38.21%
	Long	97	15.77%
	Diphthongs	283	46.02%
<b>Total</b>		<b>615</b>	<b>100%</b>

As shown in Table 1, the highest percentage of types of errors based on segmental features in pronouncing English vowels performed by students belongs to diphthongs (283 or 46.02% of 615 total errors), followed by short vowels (235 or 38.21% of 615 total errors), and the last, long vowels (97 or 15.77% of 615 total errors). Further, to clarify students' errors in pronouncing English vowels, the researcher also identified the number of errors students made on each vowel. The percentage of mispronounced sounds are presented in the table 2. The table shows that sound /ʊə/ is the most mispronounced sound, reaching 51 or 8.29% of total errors. The second biggest error occurred on /ɪ/ (50 or 8.13%), followed by /eɪ/ (48 or 7.80%), then /ʌ/ (46 or 7.48%), and /ə/ (45 or 7.32%). An example of the errors can be found when students pronounce the words *tourism*, *pure*, and *mature*. They pronounced it as /tu:ri:zəm/, /pju:r/, and /mætʊ:r/. The students tend to omit the diphthong /ʊə/ and replace it with the long vowel /u:/. The correct pronunciation of those words is /tʊərɪzəm/, /pjuər/, /mætʃʊər/.

Table 2 *The Percentage of Vowels Errors*

Vowels	Number of Errors	Percentage (%)
ɪ	50	8.13
i:	2	0.33
ʊ	29	4.72
u:	18	2.93
ə	45	7.32
ɜ:	33	5.37
ʌ	46	7.48
ɑ:	9	1.46
ɒ	6	0.98
ɔ:	35	5.69
æ	27	4.39
e	32	5.20
ɪə	38	6.18
eɪ	48	7.80
ʊə	51	8.29
ɔɪ	12	1.95
əʊ	35	5.69
eə	41	6.67
aɪ	29	4.72
aʊ	29	4.72
<b>Total</b>	<b>615</b>	<b>100%</b>

### *Sources of Errors*

Based on the interview and data analysis, only two sources significantly affect students' pronunciation errors in vowels; interlingual transfer and intralingual transfer. Interlingual transfer dealing with the interference of students' mother tongue towards their L2. The interference occurred because there are some differences between Bahasa Indonesia and English. The difference in the number of vowels that caused some English sounds do not exist in Bahasa Indonesia. As one interviewee said:

*“Perbedaan bahasa Indonesia sama bahasa Inggris berpengaruh ke pronunciation saya karena di bahasa Indonesia tidak ada bunyi panjang dan bunyi pendek, selain itu jumlah vowelsnya juga beda”.*

Besides, the pronunciation of alphabets in Bahasa Indonesia does not change, although they composed different words. On the contrary, there is a sound change in English though they contain the same alphabet. In addition, there are several borrowed English words in Bahasa Indonesia, which are pronounced differently. This seems to have made Indonesian English learners pronounce them the same way they pronounce those words in Bahasa Indonesia.

The other source of students' pronunciation errors is intralingual transfer. It refers to overgeneralization which means students think that they can use the same sound applicable to the pronunciation of some words in the pronunciation of words containing

similar alphabets. As in the interview, when the researcher asked, "Do you think the word food, book, blood has the same pronunciation? Why?" the student stated:

*"Iyaa, semuanya dibaca pakai u jadinya /fu:d/, /bu:k/, /blu:d/ soalnya biasanya kalau double 'o' itu dibaca jadi 'u'".*

Another example of pronunciation errors caused by intralingual transfer is when students pronounce words containing 'ea.' Students pronounced the words breakfast, sweater, instead, and leather as /bri:kfəst/, /swi:tər/, /insti:d/ and /li:tər/. They overgeneralized that 'ea' must be pronounced with long vowel /i:/ as in meat, seat, and beat. Therefore, students are supposed to pronounce as /brekfəst/, /swetər/, /msted/, and /ledər/.

## DISCUSSION

This research affirms some findings of the previous relevant studies and provides insight into students' errors in pronouncing English vowels and the factors underlie the errors. Students still made errors in pronouncing English vowels. They still have difficulties in pronouncing or distinguishing one sound from another. The errors were mainly caused by the mother tongue influence and the overgeneralization. The findings found in this research are in line with several studies (e.g. Ercan, 2018; Adila & Refnaldi, 2019; Saadah & Ardi, 2020; etc).

The first question in this research sought to determine what errors the students make in pronouncing English vowels. This research indicates that there were 615 total errors made by students, where diphthongs reached the highest percentage, 46.02%. This research found that diphthong /ʊə/ is the most challenging sound that students in pronunciation tests mispronounced. The errors can be found in the word mature, which should be pronounced as /mætʃʊər/, but the students pronounced as /mætʊ:r/. In addition, they tend to omit sound /ʊə/ and replace it with the long vowel /u:/. This result is similar to Saadah and Ardi's (2020) research, and they found that diphthong /ʊə/ is the most challenging sound mispronounced by the students in pronunciation tests with 26.47%. The second-highest percentage of errors in pronouncing English vowels is short vowels (38.21%). Students still made many errors in pronouncing the short vowel /ɪ/, e.g., skin is pronounced as /ski:n/ instead of /skɪn/. The data also aligns with Ercan (2018) found that EFL learners have problems pronouncing vowel /ɪ/. The third is long vowels, with the lowest percentage of errors made by students in pronouncing English vowels 15.77%. The errors might be caused by the fact that there are no long vowels in Bahasa Indonesia, so the students just read what is written.

The second question in this research was to find out the factors underlying the students' errors in pronouncing English vowels. The data from the interview revealed that there were two major sources are causing the errors; interlingual transfer and intralingual transfer. Interlingual transfer involves the interference of students' mother tongue towards the target language (L2). The interference includes the difference in the number of vowels between English and Bahasa Indonesia. As Fasold (2006) declares, there are twenty vocalic phonemes in English consisting of seven short vowels, five long vowels, and eight diphthongs. While in Bahasa Indonesia, the students only know five vowels; a,

i, u, e, o and there are no long vowels in Bahasa Indonesia. As a result, some English sounds do not exist in Bahasa Indonesia.

Moreover, there is no sound change in Bahasa Indonesia in different words even though they contain the same alphabets. For example, the letter 'a' is still read 'a' as in the word "apa", whereas, in English, one alphabet can be read into several sounds. For example, the alphabet 'o' can be read as /ʌ/ in the word 'tongue' or /ə/ in the word 'develop'. In addition, there are several borrowed English words in Bahasa Indonesia, which are pronounced differently. This seems to have made Indonesian English learners pronounce them the same way they pronounce those words in Bahasa Indonesia. The intralingual transfer leads to students' errors in pronouncing English vowels. This result is similar to the sources of errors proposed by Brown (1980). He stated that interlingual transfer or interference from the native language is the dominant factor causing the students' errors. This finding is also in line with Ercan (2018), who said that the influence of the mother tongue was the cause of students' errors. Research by Adila & Refnaldi (2019) also found that factors that cause students' errors in pronunciation are generally influenced by their mother tongue (81.25%). This finding is in agreement with Saadah & Ardi's (2020) findings which showed that due to the different phonological systems between Indonesia and English, there are serious problems that can cause errors.

Another source of students' pronunciation errors is overgeneralization based on intralingual transfer. Students think they can use the same sound applicable to the pronunciation of some words in words containing similar alphabets. Some examples of overgeneralization in this research are book was pronounced as /bu:k/ instead of /bʊk/, this is because double "o" is commonly pronounced with long vowel /u:/ like in food, tool, pool, and many other words. This result is similar to Brown (1980) who mentioned that the negative transfer within the target language is due to the incorrect generalization of rules in the target language and can cause errors. However, this result differs from some previous studies (Ercan, 2018; Adila & Refnaldi, 2019; Saadah & Ardi, 2020), they did not find that intralingual transfer or overgeneralization is the factor that causing students' errors in pronunciation.

## CONCLUSION AND SUGGESTION

This research has shown that there are still found many errors committed by students in pronouncing English vowels. The data revealed that diphthongs reach the highest percentage of errors committed by students. Besides, it was found that that /ʊə/, /ɪ/, /eɪ/, /ʌ/, and /ə/ were the most frequently mispronounced sounds. The errors were caused by intralingual transfer and interlingual transfer. Teachers are suggested to teach pronunciation as early as possible to minimize the students' errors in pronouncing English vowels. Further, the teachers can utilize suitable teaching methods and media to provide understandable examples of how to pronounce English sounds. Besides, students should practice English speaking more frequently in their daily life. They can learn English pronunciation themselves outside the class by using any media that can help them to improve their English pronunciation. This research is limited to discussing students' errors in pronouncing English vowels, and there may be other factors causing students' errors

not covered yet in this research. Therefore, it is hoped that there will be more in-depth research on pronunciation errors. Finally, it is expected that this research can be used as a reference for further research.

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