Jurnal Kependidikan:
Jurnal Hasil Penelitian dan Kajian Kepustakaan di Bidang Pendidikan, Pengajaran dan Pembelajaran
https://e-journal.undikma.ac.id/index.php/jurnalkependidikan/index

Vol. 9, No. 2 : June 2023
E-ISSN: 2442-7667
pp. 645-658
Email: jklppm@undikma.ac.id

Proficiency and Error of English Final Consonant Cluster Pronunciation Produced by Sundanese Students

Yusup Irawan[1]*, Dyta Ayunda Pratama[2], Nia Kurnia[3]
[1*3] Research Organization for Archeology, Language, and Literature, Badan Riset dan Inovasi Nasional
[2]English Language Program, Faculty of Teacher Training and Education, Universitas Pendidikan Indonesia
*Corresponding Author. Email: yusu019@brin.go.id

Abstract: This research aims to examine Sundanese students' proficiency and errors in performing final consonant clusters in English. The research used a qualitative approach. The participants in this research were 40 college students. Their mother tongue was Sundanese. The data were recordings, which were collected through a pronunciation test of the target clusters in a provided word list. A perceptual approach was applied to analyze the data recordings. The results of this research found that the Sundanese students were not satisfactory when performing consonant clusters in English. They were only at intermediate levels. Omissions were major errors made by the students. The Sundanese students typically omitted the last consonant for -CC and the middle consonant for -CCC and -CCCC. In addition, the Sundanese students' semester and their English grades affected the Sundanese students' proficiency. It seemed that the differences in clusters' phonological structure between English and Sundanese and unfamiliar sounds contributed to the errors. This research suggests that teachers perform explicit instruction to improve students' cluster proficiency and enhance students' phonetic knowledge of English clusters. Accurate pronunciation is an important factor affecting communication intelligibility.

Article History
Received: 06-04-2023
Revised: 08-05-2023
Accepted: 23-05-2023
Published: 16-06-2023

Key Words:
Proficiency; Error; Consonant Cluster; English; Sundanese.

How to Cite: Irawan, Y., Pratama, D., & Kurnia, N. (2023). Proficiency and Error of English Final Consonant Cluster Pronunciation Produced by Sundanese Students. *Jurnal Kependidikan: Jurnal Hasil Penelitian dan Kajian Kepustakaan di Bidang Pendidikan, Pengajaran dan Pembelajaran, 9*(2), 645-658. doi:https://doi.org/10.33394/jk.v9i2.7743

https://doi.org/10.33394/jk.v9i2.7743

Introduction

For most Indonesian students, having a good pronunciation of English may not be easy. They, as students of English as a foreign language class (EFL), face problems pronouncing words or syllables of the language because they are not familiar with English sound structures. On one side, pronunciation is one of the most important aspects of speaking skill for successful oral communication among speakers (Jenkins, 2005). Lack of pronunciation proficiency negatively impacts students' self-confidence and limits their social interactions (Gilakjani, 2016). On the other side, pronunciation is one of the most complicated skills to master among others (Tran & Nguyen, 2022). There must be factors that Indonesian students face in articulating a certain English sound due to the differences in phonological structure between English and their native language. For example, the interference of the Indonesian language into English seems to be one of the reasons why Indonesian students find difficulties in pronouncing English words. Simplification of a final-word consonant cluster by Indonesian students can be the result of the interference (Donal, 2016; Yuliati, 2014). Very different from most languages in Indonesia, such as Sundanese, English still allows two or more consonants at the end of syllables or at the end of words which may confuse and cause struggle for Indonesian learners. A sound structure that

Vol. 9, No. 2 : June 2023
E-ISSN: 2442-7667
pp. 645-658
Email: jklppm@undikma.ac.id

consists of consonant sequences without any vowel between that are pronounced in one syllable is called a consonant cluster (Roach, 1992).

Indonesian language is the second language of many students in Indonesia. Several EFL researchers studied students' pronunciation errors in the context of Indonesian speakers only. The findings of those studies revealed that Indonesian students had difficulties or made errors in pronouncing English vowels, diphthongs, and consonants, which do not exist in Indonesian phonological structure. They also made pronunciation errors in six parts of speech: nouns, verbs, adjectives, adverbs, prepositions, and conjunctions including mispronouncing English affixes and prefixes. The types of pronunciation errors made by the students were substituting English sounds with Indonesian sounds, omitting English sounds, and generalizing the pronunciations of tense morphemes which ended with /-ed/ (Bandung & Muchlas, 2020; Nurmalasari & Kania, 2019; Pratiwi & Indrayani, 2021; Rafael, 2019; Rahman & Tralala, 2021).

One thing that must be considered in studying the pronunciation of students in Indonesian is the diversity of languages in the country. In fact, Indonesia is a country with an intriguingly complex linguistic ecology (Karlina et al., 2020). A lot of Indonesian students acquired local languages as their first language or mother tongue. In other words, there are hundreds of local languages in Indonesia that are the mother tongues of Indonesian students. Hence, the influence of students' local languages on their English pronunciation in EFL classes should not be ignored (Reddivari, 2021).

In Indonesia, EFL researchers have not paid much attention to English pronunciation in the context of students as speakers of local languages. One of which is a lack of research on the pronunciation of consonant clusters in English spoken by students with the local language as their mother tongue. Therefore, this research can fill the gap. It is necessary to examine the English pronunciations of students whose mother tongue is the local language because the mother tongue is the first linguistic identity. Accordingly, the study to examine the proficiency and errors in pronouncing English word-final consonant clusters by Sundanese students.

As a dominant regional language in West Java, Sundanese has only eighteen consonants, i.e., /b/, /c/, /d/, /g/, /h/, /j/, /k/, /l/, /m/, /n/, / ɲ /, / ŋ /, /p/, /r/, /s/, /t/, /w/, and /j/. In Sundanese, the consonants that serve as the coda or are located at the back of the word are /m/, /n/, /r/, /s/, /b/, /p/, /y/, /k/, /ŋ/, /t/ and /h/ (Syahrin, 2014). Sundanese does not allow consonant clusters in syllable-coda position or word-final position at all. However, Sundanese has consonant clusters at the beginning of syllables like English does, for example, in words *ga-plok* /pl-/ 'slap', *ke-prok /pr-/*'clap', and *pu-tra /tr-/* 'son'. Therefore, it is more interesting that this study focuses on the final consonant cluster because Sundanese speakers are not familiar with the final consonant cluster system.

On the other hand, in English, there are twenty-four consonants i.e., /p/, /b/, /t/, /d/, /k/, /g/, /tʃ/, /dʒ/, /m/, /n/, / ŋ/, /f/, /v/, /θ/, /ð/, /s/, /z/, /ʃ/, /ʒ/, /r/, /l/, /h/, /w/ and /j/ (McMahon, 2001; Roach, 1992). English syllable structure is more complex than the Sundanese syllable structure. English syllable system allows two or more consonants at the coda position, such as in word *helped* /-lpt/, *fifths* /-fθs/, and *prompts* /-mpts/. Therefore, English is called a language rich with final-word consonant cluster (Yuliati, 2014).

In analyzing pronunciations, one of which is consonant cluster pronunciation, Dulay et al. proposed a surface strategy taxonomy. This concept has four error categories which are omission, addition, misformation, and misordering (Dulay et al., 1982). Omission error is the act of deleting a necessary item or sound in acquiring an English word. For example, the word *text* /tekst/ is pronounced as /teks/. On the other hand, addition error is the opposite of

Vol. 9, No. 2 : June 2023
E-ISSN: 2442-7667
pp. 645-658
Email: jklppm@undikma.ac.id

omission error. It is characterized by adding an unnecessary item or sound in acquiring an English word. For example, the word *text* /tekst/ is pronounced as /tekest/. Misformation error, however, is characterized by the use of the wrong structure of phonemes in a word. For example, the word *text* /tekst/ is pronounced as /teksd/. Last, misordering error is the act of incorrect placement of a morpheme by learners. For example, the word *text* /tekst/ is pronounced as /tekts/. Based on the problems that have been stated, this current study aims to examine Sundanese students' proficiency and errors in performing final consonant clusters in English based on English cluster types, the students' semester, and the students' scores from English class. It is expected that the research can find typical difficulties encountered by the Sundanese students in pronouncing final English consonant clusters and find solutions so that these students can improve their communication skills in English.

Research Method

This research used a qualitative approach. The main objective of this approach is to develop an understanding of the meaning and experience aspects of people's lives and social environments (Fossey et al., 2002; Quick & Hall, 2015). To achieve the goals of the research, the researchers conducted a pronunciation test of given target words as the data collection technique. The participants of this research were 40 Sundanese college students (20 men and 20 women) who had attended an English subject class. The students were also from earlier semesters (first and second semesters) and older semesters (third and fourth semesters). The data were collected through the production of target consonant clusters. The data was divided into three categories: (1) the ability to pronounce final consonant clusters in English, (2) the semester of the students, and (3) the score that they got from English class.

There were some steps to collecting the data. First, the researcher gave 15 words that contained final consonant clusters and 10 words as distractions. They were randomly mixed and typed into a data collection instrument sheet. Table 1 shows the provided words that contain target consonant clusters. In this research, the researchers analyzed three types of final consonant clusters: two consonants (-CC), three consonants (-CCC), and four consonants (-CCCC). Those final consonant cluster phonotactics are very common in English (Bouchhioua, 2019). The sound compositions of the selected final consonant clusters are based on the consideration that those compositions are common in English.

Table 1. List of Target Words

Word	Transcription	Consonant Clusters
ant	/ænt/	-CC /-nt/
camp	/kæmp/	-CC /-mp/
Gift	/gɪft/	-CC /-ft}
help	/help/	-CC /-lp/
self	/self/	-CC /-lf/
sounds	/saʊndz/	-CCC /-ndz/
jumps	/dʒʌmps/	-CCC /-mps/
text	/tekst/	-CCC /-kst/
world	/wɔrld/	-CCC /-rld/
months	/mʌnθs/	-CCC /-nθs/
tempts	/tempts/	-CCCC /-mpts/
contexts	/kɔnteksts/	-CCCC /-ksts/
twelfths	/twelfθs/	-CCCC /-lfθs/

Vol. 9, No. 2 : June 2023
E-ISSN: 2442-7667
pp. 645-658
Email: jklppm@undikma.ac.id

firsts	/firsts/	-CCCC /-rsts/
sculpts	/skʌlpts/	-CCCC /-lpts/

Second, the researchers distributed the instrument sheet and asked the students to record their voices while pronouncing the provided words in a quiet room. The recorded voices must be clear, and each word should be given a time interval of articulations in order to ease the process of analysis. The students were given a week to accomplish the task. They were allowed to pronounce the target word repeatedly until they were sure that their pronunciations were correct. By carefully checking the data sent by students, the researchers ensured that the students' voices were clear without any noise.

Table 2: Zone of Score

Level	Average Score
Satisfactory	76 - 100
Intermediate	51 - 75
Weak	26 - 50
Very Weak	0 - 25

Third, every piece of collected data was coded. Through a perceptual approach (Kang et al., 2016), the researchers examined the data by technically listening to the voices recorded by students repeatedly and carefully. The researchers classified the pronunciation errors made by the subjects of the research. The researchers divided the students' pronunciation proficiency into four zones of scores. Table 2 shows the scoring that is given to the data. The score was based on mistakes or errors occurred in English words. In pronouncing the final two consonant clusters, one correct consonant pronunciation was given 50 score (2x50=100). For the final three consonants clusters, one correct consonant pronunciation was given were given 33 score (3x33=99/100). For the final four consonants clusters, one correct consonant pronunciation was given 25 score (4x25=100). If the students correctly pronounced all the consonants, they were given 80 to 100 score based on how clear the pronunciation was.

Results and Discussion

The students in this research as participants came from various backgrounds even though they spoke the same first language, Sundanese. Half of the students were in the first and second semesters (earlier semesters), while the other half were in the third and the fourth semester (older semesters). In terms of interest, the majority of students took a liking to English for various reasons. According to the questionnaire results, some of them thought that learning English was interesting, enjoyable, and challenging. The others thought that they liked English since they had been learning it for a long time. Other students had a reason why English had brought them benefits from its role, such as being the bridge to science, being the skill they must gain to work, being the tool to communicate with foreigners, and being the language they could use to expand their fields such as running a business. Another reason was that they thought that they were interested in English since its status as an international language, but the rest of them did not include their reasons why they liked it. All students confessed that they had never been taught the pronunciation of English consonant clusters at a particular time. Nor did they specifically learn to the sounds in English and its phonological structures. They only guessed the pronunciation of the given target word.

Jurnal Kependidikan:
Jurnal Hasil Penelitian dan Kajian Kepustakaan di Bidang Pendidikan, Pengajaran dan Pembelajaran
https://e-journal.undikma.ac.id/index.php/jurnalkependidikan/index

Vol. 9, No. 2 : June 2023
E-ISSN: 2442-7667
pp. 645-658
Email: jklppm@undikma.ac.id

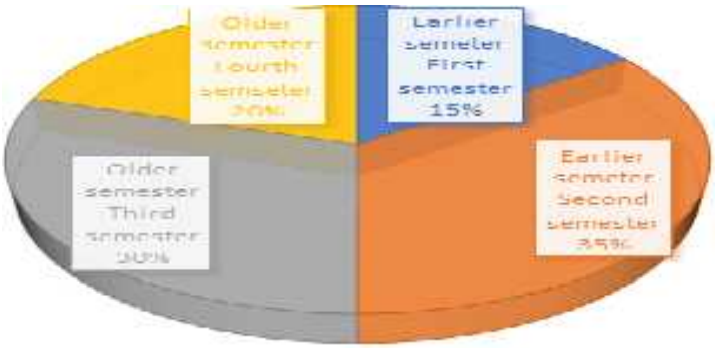

Figure 1. Participant Composition in Percentage

Totally, the researchers collected 600-word pronunciation data containing final consonant clusters spoken by 40 Sundanese students. However, the researchers had to reduce some of the pronunciation data because the quality did not match the requirements. Therefore, there were 410 pronunciation data examined. This research found that the ability of students to pronounce final-word consonant clusters varied. It depended on the categories that had been included to compare the ability of students based on (1) how many consonants were in a cluster, (2) what semester they were, (3) and what score they got from English classes that they had already taken.

1) The Students' Consonant Clusters Proficiency and Error

Table 3 and table 4 show general data calculated from all the data examined. Table 3 shows the scores of students' pronunciation scores and their pronunciation level of English consonant clusters. Table 4 shows the types of errors in the students' pronunciation. In table 3, the highest score achieved by a student is 80,13. It marks a satisfactory level which means that the student's proficiency is satisfactory at pronouncing the target consonant clusters. The lowest score in the data is 31,33. The score marks a weak level which states that the student is not able enough to pronounce final consonant clusters at the coda position in English. The students' average pronunciation score was 61.91. It means that Sundanese students are generally able enough to perform English final consonant clusters. The score marks the students at the intermediate level.

Table 3. General Proficiency

Type of score	Score	Level
Highest score	80,13	Satisfactory
Lowest score	31,33	Weak
Average score	61.91	Intermediate

From the view of the general data errors in table 4, the most frequent error that occurred was omission. The Sundanese students frequently omitted one or more consonants in the sequence of consonants. The total number of omissions occurring in general data is 283 occurrences, followed by misformation, addition, and misorder as the least number of error occurrences.

Table 4. General Error Type of English Consonant Clusters

Error Type	Total	Percentage
Omission	283	69,03
Misformation	56	13,65
Addition	64	15,61
Misorder	7	1,71
Total Error	**410**	**100**

Jurnal Kependidikan:
Jurnal Hasil Penelitian dan Kajian Kepustakaan di Bidang Pendidikan, Pengajaran dan Pembelajaran
https://e-journal.undikma.ac.id/index.php/jurnalkependidikan/index
Vol. 9, No. 2 : June 2023
E-ISSN: 2442-7667
pp. 645-658
Email: jklppm@undikma.ac.id

The next section presents the Sundenese students' scores and error types in producing different types of consonant clusters.

a) Final Two-Consonant Cluster (-CC)

The Sundanese students were able to pronounce the final two consonant clusters (-CC) at the end of English syllables or words with an average score of 70,80. The score reveals an intermediate level of cluster pronunciation proficiency. The hardest of the target words to pronounce was *gift*, with the lowest score of 59,00, while the easiest word to pronounce was *help.* Students tended to pronounce the word *gift* as /gif/ which omits the stop consonant /t/ at the final word. It seemed that the Sundanese students put more effort into pronouncing the labio-dental fricative /f/ in the cluster. Consequently, they tended to omit the last sound, the alveolar stop /t/. On the other hand, it was quite easy for Sundanese people to pronounce /p/ since the Sundanese language has coda /p/ in the phonological system of their language. Therefore, the word *help* /help/ became the easiest word to perform with the highest average among other words.

Table 5. The Proficiency Scores of Final Two Consonant Cluster Pronunciation

No.	Words	Score
1	Gift	59,00
2	Camp	70,50
3	Ant	72,50
4	Self	74,37
5	Help	77,62
	Average	**70,80\ intermediate**

Another word that was hard enough to perform by the Sundanese students after the word *gift* was *camp.* Even though the Sundanese language has the /p/ at the end of a syllable or word, mistakes or errors caused by omitting the sound /p/ could have occurred. The sequence /-mp/ in Sundanese final consonant clusters never exists. The omission of /p/ was probably due to the homorganic position of the voiced nasal /m/ and the voiceless stop /p/. Homorganic means sharing the same point of articulation. Then, the nasal /m/ sound is a voiced sound, while the stop /p/ is voiceless. The nasal /m/ may reduce the sound energy of /p/.

Table 6. Error Types of Final Two Consonants Cluster Pronunciation

Error Type	Ant	Camp	Gift	Self	Help	Total	Percentage
Omission	9	16	29	1		56	82
misformation				7	1	8	10
addition				1	4	5	7
misorder				1		1	1
				Total Error		**67**	**100%**

In relation to the type of pronunciation error, omission was the type of error that most often appeared in the students' pronunciation of the final two-consonant cluster, followed by misformation, misorder, and addition. Generally, the sounds which were omitted by the students were the last sounds in the words *ant*, *camp*, and *gift*. The real pronunciations of the words were /an/, /cam/, and /gif/. In pronouncing the word *help,* the major type of error was addition. The student tended to insert a schwa vowel /ə/ between the final clusters. The insertion between two consonants in a cluster is called epenthesis. Misformation of the word *gift* was dominant error made by the students. They change the last sound /f/ with the sound /p/.

Jurnal Kependidikan:
Jurnal Hasil Penelitian dan Kajian Kepustakaan di Bidang Pendidikan, Pengajaran dan Pembelajaran
https://e-journal.undikma.ac.id/index.php/jurnalkependidikan/index
Vol. 9, No. 2 : June 2023
E-ISSN: 2442-7667
pp. 645-658
Email: jklppm@undikma.ac.id

b) Final Three-Consonant Cluster (-CCC)

The average proficiency score achieved by the students in pronouncing the final three-consonant clusters (-CCC) was 58.24. Meanwhile, the highest and lowest scores were 69,02 for the word *sounds* and 42,27 for the word *text*. The average score indicated that in pronouncing English final three-consonant clusters, the students' proficiency was categorized into the intermediate level. Even though the students' pronunciation proficiency in the final two-consonant cluster and the final three-consonant cluster are at the same level, but the scores were different. The proficiency scores of the final three-consonant cluster pronunciation were lower than the proficiency scores of the final two-consonant cluster pronunciation.

Table 7. Proficiency Scores of Final Three-Consonant Cluster Pronunciation

No.	Words	Score
1	Sounds	69,02
2	world	65,45
3	Jumps	60,77
4	Months	53,50
5	Text	42,27
	Average	**58,24 intermediate**

The total error in pronouncing the final three-consonant clusters was 148 occurrences. In relation to the error type, omission was still a major error performed by the Sundanese students. There are 90 omission errors made by the students. The students omitted /d/, /p/, /s/, /l/, and /θ/ when they were pronouncing the words sounds, *jumps*, *text*, *world*, and *months*. They consistently omitted the middle consonants of the target clusters. The word *text* was the word with a final three-consonant cluster that got the lowest proficiency score. The word *text* was also the most frequently mispronounced.

Table 8. Error Types of Final Three Consonants Cluster Pronunciation

Error Type	Sounds	Jumps	Text	world	Months	Total	Percentage
Omission	17	17	39	9	8	90	61
addition		17		23		40	27
misformation	2				16	18	12
misorder						0	0
				Total Error		**148**	**100%**

The students also produced addition or epenthesis when pronouncing the final three-consonant clusters. An epenthesis caused a change in syllable structures. The target clusters were broken into two new syllables. The word *jumps* which was supposed to be only one syllable was broken into /dʒʌm/ and /pəs/. The total errors of addition were 40. The next error type is misformation. There are 18 misformation errors performed by students when they were pronouncing the words *months* and *sounds*. The students replace the target consonants /z/ and /θ/ in the word *sounds* and *months* with /s/ and /t/.

c) Final Four-Consonant Cluster (-CCCC)

In pronouncing the final four-consonant clusters, the Sundanese students were still qualified for the intermediate level. They were still considered capable enough to perform the target clusters. The average score was 56,7. The average score was lower than the average score achieved by the students in pronouncing the final three-consonant clusters. The highest score for these clusters was 64,87, while the lowest score was 42,00. The most difficult words to perform by the students were *warmth* and *twelfths*. Both of the words consist of the sound /θ/.

Jurnal Kependidikan:
Jurnal Hasil Penelitian dan Kajian Kepustakaan di Bidang Pendidikan, Pengajaran dan Pembelajaran
https://e-journal.undikma.ac.id/index.php/jurnalkependidikan/index
Vol. 9, No. 2 : June 2023
E-ISSN: 2442-7667
pp. 645-658
Email: jklppm@undikma.ac.id

The voiceless labiodental fricative is one of the non-existing sounds both in Sundanese and Indonesian language. Thus, it could be another evidence that Indonesian people specifically Sundanese people are hard to produce the sound /θ/ due to the difference in phonological system. On the other hand, the word *sculpts* had the highest score among other words indicating that this word was the easiest word to produce.

Table 9. Proficiency Scores of Final Four-Consonant Cluster Pronunciation

No.	Words	Score
1	sculpts	64,87
2	attempts	63,62
3	prompts	61,87
4	warmth	51,12
5	twelfths	42,00
	Average	**56,70 intermediate**

The result of the error examination showed the same findings as before which omission appeared to be the most common error found in the data. There were 137 omission errors which represented about 70,% of the total final four-consonant cluster errors (195 errors). There were two kinds of omission observed. The first was consonant omission at the back of the English clusters, such as in the word *warmth*. They omitted the sound /θ/. The second was consonant omission in the middle of the clusters, such as in the word *attempts* and *sculpts*. They omitted the sound /s/. The words *attempts* and *prompts* had the same omission occurrences while the *twelfths* had the highest number. It appeared that misformation errors also contributed significantly to the result of *twelfths* pronounced by Sundanese students.

Table 10. Error Types of Final Four-Consonants Cluster Pronunciation

Error Type	warmth	twelfths	attempts	prompts	sculpts	Total	Percentage
Omission	14	37	36	36	14	137	70
misformation	10	20				30	16
addition	20	1		1		22	11
misorder			1		5	6	3
				Total Error		**195**	**100%**

2) The Proficiency based on Students' Semesters

The highest score achieved by the students who were in earlier semesters (first and second semesters) was 75,80. The lowest score was 42,60. The average score was 58,20 which implied that in general they were able enough to produce final English consonant clusters. This score classified students at an intermediate level. For the older semester students (third and fourth semester), as it could be seen in Table 11, the average score of this data was 65,59 which indicated that older students were able to produce final-word consonant clusters in English. The lowest score of this data was 50,00 which could be considered as a weak level or implying that the student was not able enough to perform final-word consonant cluster. On the other hand, the highest average score was from the 7th respondent with 80,13 score. It implied that the student was good at producing the final-word consonant cluster in English. Even though the highest score was on the satisfactory level, on average score, older semester students could be concluded to have an intermediate level in which they were capable enough to produce English final-word consonant clusters.

Jurnal Kependidikan:
Jurnal Hasil Penelitian dan Kajian Kepustakaan di Bidang Pendidikan, Pengajaran dan Pembelajaran
https://e-journal.undikma.ac.id/index.php/jurnalkependidikan/index
Vol. 9, No. 2 : June 2023
E-ISSN: 2442-7667
pp. 645-658
Email: jklppm@undikma.ac.id

Table 11. The Comparison between Earlier and Older Semester Score Result

Semester	Highest Score	Lowest Score	Average Score
Earlier	75,80 (intermediate)	42.60 (weak)	58.20 (intermediate)
Older	80,13 (satisfactory)	50,00 (weak)	65.59 (intermediate)

The overall findings of this comparison showed that the older semester had a higher average score than the earlier semester students. There was a score gap between the earlier semester and the older semester. However, the two groups were classified into the same level of pronunciation performance.

3)The Proficiency based on Students' English Grade

The data based on students' English grades showed that the highest score was held by the 7th respondent with an 80,13 score. The lowest score was from the 27th respondent with a 31,33 score. The total average of this data was 66,20 which meant that the students who got an A-graded English score were able enough to produce an English final-word consonant cluster. Those students whose English scores were graded B were considered to be able enough to pronounce consonant clusters with the total average appeared to be 57,6. The lowest score in this data was 42,60 which implied that the student was not able enough to perform the final-word consonant clusters in English.

Table 12. The Comparison between A and B English Score

Grade	Highest Score	Lowest Score	Average Score
A Grade	80,13 (satisfactory)	31,33 (weak)	66.20 (intermediate)
B Grade	75,80 (intermediate)	42,60 (weak)	57.59 (intermediate)

To sum up, the comparison between A-graded students and B-graded students showed that those students who had an A-graded score appeared to have a higher total average than those who got a B-graded score. It implied that A-graded students were more capable of producing consonant clusters in English's final word rather than B-graded students. However, even though there was a difference in average score, both A-grade and B-grade students were at the same level i.e. intermediate level which meant that students were capable enough to pronounce English final-word consonant clusters.

Discussion

The structure of consonant clusters in English and Sundanese is quite different. The clusters in English are more complicated than those in Sundanesee. English shares a very limited structure on consonant clusters with Sundanese. English does not share final consonant cluster structures with Sundanese at all. The difference in structure makes EFL Sundanese students have difficulties pronouncing English final consonant clusters. The researchers investigated the Sundanese students' proficiency in the clusters and identified the errors they made. The results of this research are important to show the difficulties faced by

Vol. 9, No. 2 : June 2023
E-ISSN: 2442-7667
pp. 645-658
Email: jklppm@undikma.ac.id

Sundanese students in pronouncing English final consonant clusters and to show the effect of English phonology on EFL classes for Sundanese students.

Examination of the data showed that the Sundanese students' proficiency in pronouncing English final consonant clusters was not satisfactory. It was very clear that the Sundanese students failed to perform a lot of English final consonant clusters. This student's achievement portrayed their difficulties in pronouncing the target clusters as native Sundanese speakers. This problem does not merely belong to Sundanese students, but also other EFL students, such as Indonesian students (Widya Sari, 2022; Yuliati, 2014), Saudi students (Alzinaidi & Latief, 2019; Bouchhioua, 2019), and Vietnamese students (Tran & Nguyen, 2022). Their proficiency in the target clusters fell to an intermediate level. Then, it was found that even though the general data put the participants' proficiency at an intermediate level, the researchers found that the students' proficiency varied. There was an interval between the student's highest score and the student's lowest score. The score interval was wide enough (80,13-31,33). The highest score was almost three times the lowest score. Overall, the comparison of the Sundanese students' proficiency in producing final two, three, and four consonant clusters showed that the easiest type of consonant cluster to perform was the final two-consonant clusters (-CC) while the hardest to perform was the final four-consonant clusters –(CCCC). The students' proficiency scores decreased when they pronounced the final three and then four consonant clusters. Then, it can be formulated that the more complex the consonant cluster, the more difficult it is to pronounce by students and the lower the score they achieve, and vice versa.

The examination of the effect of the semester on the students' proficiency showed that the two groups of students from lower and higher semesters achieved the same proficiency level, intermediate. However, it was proven that the scores they achieved were different. The average score of 65.59 put the higher-semester students at the top of the intermediate level. On the other hand, the average score of 58.20 put the lower-semester students at the bottom of the intermediate level. It means that the students' semesters influenced the average proficiency score. Furthermore, it could be inferred that the higher the students' semester, the higher the score they got. The grade of English as a subject at university also influenced proficiency scores. The higher the grade of the English obtained, the higher the proficiency score achieved by the students and vice versa. The average score of 66.20 put the students with an A grade at the top of the intermediate level. On the other side, the average score of 57.59 put the students with B-grade at the bottom of the intermediate level. Alzinaidi and Latief (2019) also found the effect of semester levels on students' errors. They found that students at lower levels of the semester made more errors. Then, students at higher levels made lower errors in pronouncing English final clusters (Alzinaidi & Latief, 2019).

The difference in phonological structure seems to mainly contribute to the failure of Sundanese students to pronounce the final clusters in English. The students admitted that they did not have special knowledge to articulate consonant clusters in English. Their ability to articulate the clusters was obtained indirectly through accidental hearing or they just guessed how to articulate them. Therefore, students must be given special material and practice to articulate complex clusters. According to Plailek & Essien (2021) there are three strongest factors that contribute to the students' pronunciation problems: (1) the students' basic knowledge of English pronunciation, (2) the lack of teachers' instructions, (3) and the low frequency of English pronunciation. Teachers are encouraged to provide pronunciation exercises to support effective English communication. Pronunciation has long been a crucial component of teaching English. It is one of the most difficult skills to master. (Tran & Nguyen, 2022). Khanbeiki (2015) proposed implicit instruction to improve students' pronunciation.

Vol. 9, No. 2 : June 2023
E-ISSN: 2442-7667
pp. 645-658
Email: jklppm@undikma.ac.id

Although implicit pronunciation instruction resulted in progress during the course, his findings showed an explicit instruction was the best method for improving students' pronunciation. Gordon et al., (2013) also found the benefit of explicit instruction for students. His data demonstrated that explicit instruction made learners notice the second language features, i.e., explicit presentation of contents, guided analysis and practice, and corrective feedback. Explicit instruction can be beneficial for second language learners in the development of comprehensible speech.

The unfamiliar sound was another reason why it was harder for the students to make correct pronunciations. Several English phonemes were not recognized by the students. For example, the interdental fricative sound /θ/ is one of the unfamiliar English sound for Sundanese students. The sound /θ/ is a good example to show the difference in sound inventories between English and Sundanese. That consonant does exist in English along with the other 24 English consonants (Dewi, 2015; Roach, 1992). Meanwhile, the consonant does not exist either in Sundanese or Indonesian. Consonant sound /θ/ is the hardest consonant to produce by EFL students in Indonesia (Jessica et al., 2015). The unfamiliarity of the /θ/ sound in the composition in consonant cluster strengthened the reason why the words *months* /mʌnθs/ and *twelfths* /twelfθs/ were hard to perform by Sundanese students. Another sound that is very difficult to speak by native Sundanese speakers is the voiceless labio-dental fricative /f/ (Risdianto, 2017), especially by older Sundanese speakers. Young Sundanese speakers are probably able to pronounce the sound, but many non-Sundanese speakers may not perceive the sound clearly. Finally, non-Sundanese speakers judge the Sundanese speakers' /f/ pronunciation as /p/ instead of /f/. The emergence of /f/ in the English cluster composition made it harder for the Sundanese students to perform the target clusters. They found two barriers at the same time: unfamiliar consonant structures and unfamiliar sounds.

From the point of view of error types, omission was the main error made by the Sundanese students in performing English final consonant clusters. The omission errors were quite dominant. The average percentage was 69,03%, followed by addition errors (15,61%), misformation errors (13,65%), and misorder errors (1,71%). The finding had a similarity to what had been revealed by (Yuliati, 2014) that Indonesian students faced problems pronouncing consonant clusters. They simplified the production of the consonant cluster by omitting one or more consonants. Yuliati's finding did not specify the consonant positions that were omitted by the students. This research successfully specified the consonant positions omitted by Sundanese students. The students tended to omit the last consonant of English's final-two consonants (-CC). In the context of (-CCC) and (-CCCC), Sundanese students tend to omit the consonants in the middle of the clusters. Omission possibly hampers the intelligibility of communication spoken by nonnative speakers of English. Therefore, it is suggested that English teachers provide and design specific materials to raise students' cluster awareness which focuses on more difficult clusters for their students. The cluster simplification was also performed by Vietnamese. Vietnamese students delete the first and second consonants of English's final complex clusters (Tran & Nguyen, 2022). Vietnamese is one of the languages that does have final consonant clusters. Vietnamese students also find difficulties in pronouncing English clusters. Omission was found to be the most common pronunciation strategy to encounter final English clusters (Nguyen, 2002). Final cluster positions also cause pronunciation difficulties faced by Saudi students,Thai students, and Javanese students (Alzinaidi & Latief, 2019; Ariwibowo, 2020; Le & Boonmoh, 2020). It seems that consonant omission is the most favorable strategy applied by students whose language does not have or lacks final consonant clusters.

Vol. 9, No. 2 : June 2023
E-ISSN: 2442-7667
pp. 645-658
Email: jklppm@undikma.ac.id

Conceptually, teachers should not see that EFL students can acquire the pronunciation of English consonant clusters well through a natural process. Students from different local language backgrounds may have distinctive errors due to the influence of their local language structure. Therefore, practically teachers need to take a few minutes to give specific pronunciation practices in the classrooms. Then, the teachers need to identify the language backgrounds of the students they encounter in class to specify the students' problems. In addition, phonetic knowledge can help students pronounce sounds in a foreign language.

Conclusion

The conclusions obtained based on the findings of this study are that English pronunciation is an important element in foreign language teaching. It really affects students' communicative proficiency. Pronunciation research is beneficial for both teachers and students. Teachers can find the right formula for students' pronunciation abilities. In terms of students' interests, pronunciation research is useful for finding their main difficulties in pronouncing sounds in a foreign language. This research evidence showed that Sundanese students found difficulties in accomplishing the target final consonant clusters in English. Their pronunciation proficiency is not satisfactory. The more complex the consonant clusters are given, the more difficult it is for the Sundanese students to pronounce them. Generally, semester levels and grades obtained in an English subject appeared to reflect students' pronunciation competence. The students from the higher-level semester with a better English grade achieved better final cluster proficiencies. Discrepancies in sound systems between English and Sundanese including students' unfamiliarity with a cluster structure and a certain English sound mainly contribute to the students' failure to perform English final clusters. It appeared that omission became the typical error performed by Sundanese students.

Because accurate pronunciation of final consonant clusters in English is hard to achieve by Sundanese students and probably hard to achieve by students whose language does not have cluster features. Gilakjani et al. (2011)recommended that teachers pay serious attention to this problem. They should emphasize the importance of pronunciation elements including consonant clusters. Khanbeiki (2015) proposed that explicit instruction during courses is the best approach for improving students' pronunciation. His research findings show that although implicit instruction positively contributes to the students' pronunciation proficiency, explicit instruction is still a better approach.

Recommendation

This research suggested that teachers allocate a special time of about five minutes to train students in pronunciation practice. The lesson can be done before or after the main lesson. Teachers can insert target words with consonant clusters into the course material. The goal of pronunciation lessons should be to focus on intelligible oral communication, not to teach students to speak like native English speakers.

References

Alzinaidi, M. H., & Latief, M. M. A. L. M. (2019). Diagnosing Saudi Students' English Consonant Pronunciation Errors. *Arab World English Journal*, *10*(4). https://doi.org/10.24093/awej/vol10no4.14

Ariwibowo, V. S. (2020). Sound Deletion by Javanese Speakers in Elizabeth Bishop's "One Art." *Proceeding of Annual Linguistic Conference Atma Jaya 18*.

Bandung, M., & Muchlas, S. (2020). *An Analysis of Pronunciation Errors Made by Indonesian Singers in Singing English Song on Youtube*. *7*(1), 99–108.

Vol. 9, No. 2 : June 2023
E-ISSN: 2442-7667
pp. 645-658
Email: jklppm@undikma.ac.id

Bouchhioua, N. (2019). Epenthesis in the Production of English Consonant Clusters by Tunisian EFL Learners. *Applied Linguistics Research Journal*. https://doi.org/10.14744/alrj.2019.87487

Dewi, N. L. D. S. (2015). Phonological Problems Faced by Ni Nengah Riasih "A Trader in Kuta." *Litera Jurnal Bahasa Dan Sastra*, *1*(2).

Donal, A. (2016). Indonesian Students' Difficulties in Pronouncing English Diphthongs. *Journal of English Education*, *2*(2).

Dulay, H., Burt, M., & krashen, S. (1982). *Language Two*. Oxford University Press.

Fossey, E., Harvey, C., Mcdermott, F., & Davidson, L. (2002). Understanding and Evaluating Qualitative Research*. *Australian & New Zealand Journal of Psychiatry*, *36*(6). https://doi.org/10.1046/j.1440-1614.2002.01100.x

Gilakjani, A., Ahmadi, S., & Ahmadi, M. (2011). Why is Pronunciation so Difficult to Learn? *English Language Teaching*, *4*(3). https://doi.org/10.5539/elt.v4n3p74

Gilakjani, A. P. (2016). English Pronunciation Instruction: A Literature Review. In *International Journal of Research in English Education* (Vol. 1, Issue 1). www.ijreeonline.com

Gordon, J., Darcy, I., & Ewert, D. (2013). Pronunciation Teaching and Learning: Effects of Explicit Phonetic Instruction in the L2 Classroom. *Proceedings of the 4th Pronunciation in Second Language Learning and Teaching Conference* , 194–206.

Jenkins, J. (2005). Implementing an International Approach to English Pronunciation: The Role of Teacher Attitudes and Identity. *TESOL Quarterly*, *39*(3). https://doi.org/10.2307/3588493

Jessica, S., Basri, H., & Josep, E. O. (2015). Improving The Pronunciation Through Listening To English Songs. *E-Journal of English Language Teaching Society (ELTS)*, *3*(2), 10.

Kang, O., Ca Thanh Vo, S., & Kerry Moran, M. (2016). Perceptual Judgments of Accented Speech by Listeners from Different First Language Backgrounds. *The Electronic Journal for English as ASecnd Language*, *1*(1).

Karlina, Y., Rahman, A., & Chowdhury, R. (2020). Designing Phonetic Alphabet for Bahasa Indonesia (PABI) for the Teaching of Intelligible English Pronunciation in Indonesia. *Indonesian Journal of Applied Linguistics*, *9*(3). https://doi.org/10.17509/ijal.v9i3.23223

Khanbeiki, R. (2015). The Effect of Explicit vs. Implicit Instruction on the Learnability of English Consonant Clusters by Iranian Learners of English. *Advances in Language and Literary Studies*, *6*(2). https://doi.org/10.7575/aiac.alls.v.6n.2p.103

Le, H. T., & Boonmoh, A. (2020). Thai Students' Production of English Coda Clusters: An Experiment on Sonority with Thai University Students Taking an English Fundamental Course. In *Human Behavior, Development and Society* (Vol. 21, Issue 2).

Nguyen, N. (2002). Interlanguage Phonology and the Pronunciation of English Final Consonant Clusters by Native Speakers of Vietnamese. *Ohio.Edu*.

Nurmalasari, M., & Kania, I. (2019). The Analysis of Students' Pronunciation Errors in Reading Aloud. *JETLe (Journal of English Language Teaching and Learning)*, *1*(1). https://doi.org/10.18860/jetle.v1i1.7761

Plailek, T., & Essien, A. M. (2021). Pronunciation Problems and Factors Affecting English Pronunciation of EFL Students. *Turkish Journal of Computer and Mathematics Education*, *12*(12), 2026–2033.

Pratiwi, D. R., & Indrayani, L. M. (2021). Pronunciation Error on English Diphthongs Made by EFL Students. *TEKNOSASTIK*, *19*(1). https://doi.org/10.33365/ts.v19i1.486

Vol. 9, No. 2 : June 2023
E-ISSN: 2442-7667
pp. 645-658
Email: jklppm@undikma.ac.id

Quick, J., & Hall, S. (2015). Part Two: Qualitative Research. *Journal of Perioperative Practice*, *25*. https://doi.org/10.1177/1750458915025007-803

Rafael, A. M. diana. (2019). An Analysis on Pronunciation Errors Made by First Semester Students of English Education Department STKIP CBN. *Jurnal Ilmiah Bina Bahasa*, *12*(1), 11–20. https://doi.org/10.33557/binabahasa.v12i1.254

Rahman, A., & Tralala, L. N. (2021). EFL Students' Pronunciation Problems in Presenting Thesis Proposal at Tertiary Level of English Department. *Jurnal Kependidikan: Jurnal Hasil Penelitian Dan Kajian Kepustakaan Di Bidang Pendidikan, Pengajaran Dan Pembelajaran*, *7*(3), 576. https://doi.org/10.33394/jk.v7i3.3921

Reddivari, M. (2021). Mother Tongue Influence in English Pronunciation: Problems of Learning English as a Second Language in India. *Journal of Interdisciplinary Cycle Reseach*, *XIII*(XI).

Risdianto, F. (2017). A Phonological Analysis on the English Consonants of Sundanese EFL Speakers. *JURNAL ARBITRER*, *4*(1). http://arbitrer.fib.unand.ac.id

Roach, P. (1992). *English Phonetics and Phonology A practical course A practical course: Vol. Fouth edition*. Cambridge University Press

Syahrin, E. (2014). Deskripsi Fonotaktik Bahasa Sunda. *Bahas*, *89*(Januari-Maret), 1689–1699.

Tran, T. K. L., & Nguyen, A. T. (2022). Common Mistakes in Pronouncing English Consonant Clusters: A case Study of Vietnamese Learners. *Can Tho University Journal of Science*, *14*(3), 32–39. https://doi.org/10.22144/ctu.jen.2022.040

Widya Sari, R. (2022). The Problem of Syllabification in Consonant Cluster for English Department Students. *JADEs Journal of Academia in English Education*, *2*(2). https://doi.org/10.32505/jades.v2i2.3727

Yuliati, Y. (2014). Final Consonant Clusters Simplification by Indonesian Learners of English and Its Intelligibility in International Context. *International Journal of Social Science and Humanity*, *4*(6), 513–517. https://doi.org/10.7763/ijssh.2014.v4.409