PRONUNCIATION VARIABILITY OF ENGLISH DENTAL FRICATIVES AMONG SUNDANESE LEARNERS IN DIFFERENT ACADEMIC DISCIPLINES

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Abstract: Clear pronunciation is a critical component of successful communication, essential for developing both speaking and listening skills. However, pronunciation challenges often arise due to differences between written and spoken forms of a language, as well as the influence of a speaker's native language. This study examines the production of English dental fricative consonant sounds by Sundanese students from English and non-English departments at Widyatama University, Indonesia. The study aims to identify common pronunciation errors and their causes, comparing students who have extensive English training with those who do not. A qualitative descriptive method was employed, supported by content analysis, to analyze the pronunciation of 10 students—five from each department. The findings reveal significant differences in pronunciation accuracy between the two groups, with English Department students generally performing better. Common errors include the substitution of dental fricatives with alveolar stops and labiodental fricatives with bilabial plosives. The primary causes of these errors are attributed to insufficient practice, lack of phonetic awareness, and interference from the native Sundanese language. This research highlights the need for targeted pronunciation training and increased phonetic awareness to improve English pronunciation skills among non-English majors.

Keywords: English dental fricatives; language interference; pronunciation errors; Sundanese students; phonetic awareness.

INTRODUCTION

In recent years, there has been increasing attention on pronunciation challenges faced by English language learners, especially those whose first language has significantly different phonetic structures. Aji et al. (2023) emphasized that vocabulary acquisition is intrinsically linked to pronunciation proficiency, as students often struggle with phonetic aspects of new words. This connection between vocabulary and pronunciation highlights the multifaceted nature of language learning difficulties.

Previous studies have extensively explored pronunciation problems among English learners. Aji et al. (2023) highlighted the difficulties students face in building English vocabulary, which indirectly affects their pronunciation. AlSaqqaf et al. (2023) investigated the self-concept of Chinese EFL learners and its impact on their pronunciation skills, emphasizing the psychological aspects influencing pronunciation. Amalia and Amin (2023) focused on second-semester English Department students' awareness of their pronunciation problems, underscoring the need for heightened phonetic awareness.

Ambalegin and Arianto (2018) examined the mispronunciations of English vowels and consonants by an Indonesian public figure, identifying the influence of the native language on pronunciation errors. Similarly, Ambalegin and Afriana (2023) discussed the importance of word stress in English pronunciation, which is often
overlooked but crucial for clarity. Annisa and Wariyati (2023) emphasized the role of pronunciation in overall fluency, highlighting that clear pronunciation is a key attribute of effective communication.

Babajanova and Babadjanova (2023) identified challenges and potential solutions in teaching English pronunciation as a second language in Uzbekistan, pointing out the universal nature of these difficulties. Benjamin-Obwode et al. (2024) evaluated the effectiveness of hybrid learning in pronunciation pedagogy in Nigeria, showing that innovative teaching methods can enhance pronunciation skills. Emmanuel et al. (2022) analyzed the uniqueness of Ghanaian English pronunciation, particularly focusing on dental fricative sounds, revealing common substitution errors similar to those found in other non-native English speakers.

Fernández et al. (2024) conducted a comparative study on pronunciation instruction methods, finding that explicit phonetic instruction significantly improves learners' pronunciation accuracy. Haris and Asmayanti (2023) investigated the pronunciation challenges faced by first-year English students at Universitas Muhammadiyah Makassar, revealing that lack of exposure and practice are major contributing factors. Hoang et al. (2023) explored the use of AI chatbots in improving vocational students' English pronunciation, demonstrating the potential of technology in language learning.

Khoshmuratovna (2023) provided a comprehensive overview of common pronunciation problems faced by ESL and EFL students, highlighting the persistent issue of mother tongue interference. Kurniawan and Thren (2024) examined the influence of the mother tongue on English pronunciation among Indonesian EFL learners, identifying specific phonological interferences. Kusuma (2018) emphasized the need for integrating English pronunciation practice into regular language learning activities to mitigate these errors.

Lestari et al. (2024) studied the impact of digital tools on improving students' English pronunciation, finding that technology-enhanced learning environments significantly benefit pronunciation skills. Luthfianda et al. (2024) explored the pronunciation challenges faced by Indonesian university students, particularly in producing English fricative sounds, and suggested targeted instructional strategies to address these issues. Manurung et al. (2024) used the Elsa Speak application to diagnose English vowel and consonant pronunciation errors among English Department students, demonstrating the effectiveness of digital pronunciation aids.

Mesfer et al. (2024) conducted an error analysis of undergraduate students' English pronunciation, identifying common mistakes and their underlying causes. Nguyen (2023) investigated the difficulties in teaching pronunciation to first-year English majors at Dong Nai University, highlighting the need for specialized training for pronunciation instructors. Nirwana and Suhono (2023) studied phonological interference in English pronunciation among Buginese and Javanese students, providing insights into regional linguistic influences on English learning.

Octaviani et al. (2024) examined the impacts of first language on students' English pronunciation, finding that mother tongue interference remains a significant challenge. Phany and Dara (2024) investigated pronunciation problems faced by teacher-trainees at the National Institute of Education in Cambodia, suggesting that early intervention and targeted training can mitigate these issues. Purnama et al. (2023) focused on detecting mispronunciations of non-native postgraduate students of English language education in Indonesia, emphasizing the importance of continuous pronunciation practice.

Putri et al. (2023) analyzed vowel pronunciation errors among Grade IX students, highlighting the need for early phonetic training. Qizi and Umedovich (2023) discussed American-based pronunciation standards and their application in ESL teaching. Ramzan and Javaid (2023) explored psychological factors influencing Pashto-speaking ESL students' pronunciation of English vowels, suggesting that affective factors play a crucial role in pronunciation accuracy.

Simanjuntak et al. (2023) used the Elsa Speak application to diagnose English pronunciation errors among students, demonstrating the utility of digital tools in pronunciation instruction. Sultan (2023) identified key English pronunciation difficulties for Egyptian EFL learners, providing a detailed analysis of common errors and their causes. Tegris (2020) analyzed the causes of English pronunciation problems within the framework of Ki Hadjar Dewantara's educational concepts, emphasizing the need for culturally responsive teaching methods.

Vukičević and Ćirković-Miladinović (2023) explored the use of instructive musical exercises in improving English pronunciation, highlighting the potential of alternative instructional methods. Zayniddinovna (2023) discussed the challenges of
teaching pronunciation to young learners, suggesting that early phonetic awareness is crucial for long-term pronunciation accuracy. Wahyuni et al. (2024) examined the effectiveness of using pop songs on YouTube for improving students' pronunciation mastery, demonstrating the benefits of engaging and interactive learning materials.

Dewi et al. (2024) analyzed English pronunciation among sixth-grade students, emphasizing the importance of early phonetic instruction. Awadh et al. (2024) discussed the role of phonetics instruction in improving pronunciation in Yemeni EFL classrooms, suggesting that systematic phonetic training is essential for accurate pronunciation. Awadh et al. (2024) discussed the role of phonetics instruction in improving pronunciation in Yemeni EFL classrooms, suggesting that systematic phonetic training is essential for accurate pronunciation.

Khurshidovna and Ismoilovna (2024) addressed the problems and solutions in experimental phonetics, providing practical recommendations for improving pronunciation instruction. Jihad and Damayanti (2024) examined pronunciation patterns among English education students, focusing on segmental sounds and word stress. Yu (2024) evaluated the quality of English pronunciation using a decision tree algorithm, demonstrating the potential of machine learning in pronunciation assessment.

Prahaladaiah and Thomas (2024) studied the effects of phonological and phonetic interventions on English pronunciation proficiency, highlighting the importance of targeted interventions. Abellio (2024) investigated pronunciation deviations among agriculture students, emphasizing the need for specialized pronunciation training in specific academic fields. Idayani et al. (2024) conducted an error analysis of students' pronunciation using the IPA application, demonstrating the effectiveness of digital tools in diagnosing pronunciation errors.

Ramadani et al. (2024) examined the impact of the Resso application on improving pronunciation among senior high school students, highlighting the benefits of using technology in language learning. Sañudo (2024) provided a manual for understanding and improving English pronunciation, offering practical tips for learners and teachers. Saidkodirovna (2024) discussed linguistic interference in teaching English pronunciation, emphasizing the need for awareness and mitigation strategies.

Ahmad et al. (2024) investigated the influence of mother tongue on English pronunciation in a specific regional context, providing insights into local linguistic challenges. Are Diden et al. (2024) described the intelligibility of fossilized English pronunciation among mentor teachers, highlighting the importance of continuous professional development. Mir and Afzar (2024) examined pronunciation constraints of syllable stress-coloration in Pakistani English, suggesting targeted interventions for improving pronunciation accuracy.

Farhan and Hadi (2024) evaluated the use of the Read Aloud feature from Microsoft Edge in improving students' pronunciation abilities, demonstrating the benefits of digital tools in language learning. Kizi (2024) discussed challenges encountered by students while learning English speaking, emphasizing the need for comprehensive pronunciation training. Suciati et al. (2024) conducted an error analysis of diphthong sounds in English pronunciation, highlighting common mistakes and their causes.

Brown (2024) critiqued the JET Programme as a vehicle for English pronunciation teaching, suggesting areas for improvement to enhance pronunciation instruction by native speakers. Benjamin-Ohwodede et al. (2024) evaluated hybrid learning methods for pronunciation pedagogy, finding that blended approaches can effectively enhance pronunciation skills.

Despite these extensive studies, there remains a significant research gap in understanding the pronunciation errors specific to Sundanese students, particularly those studying in both English and non-English departments. Previous research has not sufficiently addressed how different academic environments influence pronunciation skills. This study aims to fill this gap by examining the production of English dental fricative consonant sounds by Sundanese students from different academic backgrounds.

The novelty of this research lies in its comparative approach, assessing pronunciation errors in both English and non-English department students. By focusing on Sundanese students, this study adds to the existing body of knowledge on how native language interference and academic training impact English pronunciation. The findings of this research will provide valuable insights for educators to develop targeted pronunciation training programs that cater to the specific needs of students from diverse linguistic backgrounds.

This study aims to identify common pronunciation errors and their causes among Sundanese students, comparing the performance of those in English and non-English departments. By
addressing the existing research gap and providing novel insights, this research contributes to the broader understanding of pronunciation challenges and potential solutions in EFL contexts.

METHOD
This study employs a qualitative descriptive method supported by content analysis to examine the pronunciation of English dental fricative consonant sounds by Sundanese students from English and non-English departments at Widyatama University, Bandung, Indonesia. The analysis aims to identify common pronunciation errors and their causes, focusing on the sounds /θ/, /ð/, /f/, and /v/.

The participants of this study were 10 students from Widyatama University, consisting of 5 students from the English Department and 5 students from the Accounting Department. These students were selected because they were in their seventh and eighth semesters, ensuring they had sufficient exposure to English phonology and economic terminology.

Data collection was carried out using a combination of recording, listening, and note-taking techniques. Each participant was asked to pronounce a list of 40 economic terms in English, selected from the Oxford Dictionary of Economics 5th Edition (Hashimzade, Myles, & Black, 2017). This list included 11 specific terms containing the target dental and labiodental fricative sounds.

First, participants were recorded while pronouncing the selected terms. The recording was conducted transparently, with each participant providing consent by signing a consent letter. This ensured ethical considerations were met, and participants were fully aware of the study's purpose. Second, participants completed a demographic questionnaire to provide background information, including their area of origin, mother tongue, and daily language usage. This additional data helped in understanding the context of each participant's pronunciation patterns.

The recorded pronunciations were transcribed and analyzed using Krippendorff's (2004) content analysis technique. This method involved several steps. Initially, the audio recordings were transcribed to capture the exact pronunciations of each participant. Each fricative sound was then identified and categorized as either correctly pronounced or mispronounced. Mispronunciations were classified based on the type of error (e.g., substitution, omission) and the specific phonological processes involved. The causes of pronunciation errors were interpreted, considering factors such as lack of practice, phonetic awareness, and native language interference. Finally, the findings were synthesized to draw conclusions about the common pronunciation errors and their underlying causes.

High-quality audio and video recordings were used to ensure the accurate capture of pronunciations. Content analysis software tools assisted in the transcription and analysis of the recorded data, ensuring consistency and precision. A structured questionnaire was administered to gather demographic and background information from participants, providing additional context for interpreting the data.

RESULTS AND DISCUSSION
The respondents are 5 students from the English Department (#R1-#R5) and 5 students from the non-English Department (#R6-#R10). They are asked to pronounce 11 economics terminology (words or phrases) containing voiced and voiceless interdental fricative sounds: /θ/ and /ð/ and labiodental fricative /f/ and /v/. None of the respondents can pronounce all the economic terminology correctly. There are occurrences of pronunciation errors (see Table 1). Tables 2 and 3 show the pronunciation errors made by the respondents.

Table 1. Pronunciation errors of dental fricative

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Table 2. Dental fricative sounds: /θ/ /ð/ /f/ and /v/ (English Department)

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Table 2. Dental fricative sounds: /θ/ /ð/ /f/ and /v/ (English Department)
Phonological process of interdental fricative consonants (interdental fricative) /θ/ and /ð/ pronounced by students of the English and Non-English Department

The economic terminology below contains consonant voiceless interdental fricative /θ/ and voiced interdental fricative /ð/. The pronunciation process is carried out by English Department students namely, #R1, #R2, #R3, #R4, and #R5, and followed by exposure to pronunciation conducted by non-English students, namely the #R6 Accounting Department, #R7, #R8, #R9, and #R10.

Omission

Data 1

Commonwealth ['kəmənwelθ] [θ]

The economic terminology above contains the sound of voiceless interdental fricative [θ]. Of the 10 respondents who proclaimed the dental fricative sound in the words above, respondents in English Department #R1, #R2, #R3, #R4, and #R5 recited the voiceless interdental fricative sound [θ] correctly, namely ['kəmənwelθ].

Respondents from the non-English Department, namely the Accounting Department represented by #R6 and #R7 are still mistaken in reciting the sound of voiceless interdental fricative [θ] in the ‘commonwealth’ terminology. #R6 and #R7 recite the sound with ['kəmənwelt'], where there is a segmental pronunciation error at the replacement level that is the replacement of voiceless interdental fricative /θ/ into voiceless alveolar stop [t] sounds. Whereas #R8, #R9, and #R10 have differences from other respondents because they can recite the sound [θ] in the terminology correctly namely ['kəmənwelθ].

The cause of errors in the pronunciation of dental fricative consonant sounds (dental fricative) by two Accounting Department respondents #R4 and #R5 was due to a lack of practice and awareness in pronouncing English sounds, especially the voiceless dental fricative consonant sound [θ]. Errors can also be based on a lack of understanding of phonetic sounds because respondents do not have knowledge of the science of sounds in English. Apart from that, the respondent’s mother tongue background, which is Indonesian and Sundanese, also resulted in a lack of familiarity with the pronunciation of these sounds so respondents were not fluent in pronouncing the voiceless dental fricative [θ] and shifted to other areas of speech which were easier and more familiar to pronounce, namely, the voiceless sound of the alveolar stop [t] due to the very significant similarity of the acoustic sound, Tyler et al (2019).

Data 2

Credible threat ['θret] [θ]

The economic terminology above contains the sound of voiceless interdental fricative [θ]. Of the 10 respondents who pronounced the dental fricative sound in the word above, only two respondents in the English Department represented by #R3 and #R5 recited the voiceless interdental fricative sound [θ] correctly, namely ['θret]. The other three recipes, namely #R1, #R2, and #R4 are still reciting the sound with mistakes, namely ['tret]. In this case, there is an error at the segmental level made by the three respondents, namely the replacement or omission error where the sound of voiceless interdental fricative [θ] is pronounced into the sound of voiceless alveolar stop [t].

Respondents from the non-English Department, namely the Accounting Department represented by #R6, #R7, #R8, #R9, and #R10 are still wrong in reciting the sound of voiceless interdental fricative [θ] in the terminology 'credible threat'. The five respondents made a pronunciation error at the level...
of replacement (omission). #R6, #R7, #R8, and #R9 recite the sound the same as respondents from English Departments namely [ˈtret] where the sound of voiceless interdental fricative [θ] is pronounced into voiceless alveolar stop [t], and #R10 recite [ˈdret] where the sound of voiceless interdental fricative [θ] is pronounced into voiceless plosive alveolar [d].

The cause of errors in the pronunciation of dental fricative consonant sounds by respondents from the English Department namely #R1, #R2, and #R4, and the five Accounting Department is due to a lack of practice and awareness in pronouncing English sounds, especially voiceless dental fricative consonant sounds [θ], the word threat is also believed to be less familiar to students, especially the Accounting Department. Errors can also be based on a lack of understanding of phonetic sounds because respondents do not have knowledge of the science of sounds in English. Apart from that, the mother tongue background of respondents from both Departments, which are Indonesian and Sundanese, also resulted in a lack of familiarity with the pronunciation of this sound so the respondent was not fluent in pronouncing the voiceless dental fricative [θ] and shifted to other areas of speech which were easier and more familiar to pronounce, namely, the voiceless sound of the alveolar stop [t] due to the very significant similarity of the acoustic sound, Tyler et al (2019).

Data 4
Creditworthiness ['kred.ɪtˌwɝːθi.nəs] [ð]
The economic terminology above contains the voiced interdental fricative [ð]. Of the respondents who pronounced the voiced dental fricative sound in the words above, the five English Department respondents #R1, #R2, #R3, #R4, and #R5 pronounced the voiced interdental fricative [ð] incorrectly. #R1, #R2, #R3, and #R4 make segmental errors at the replacement level (omission) where the voiced interdental fricative sound [ð] changes to the voiceless alveolar stop [t], namely ['kred.ɪtˌwɜː.ˌtɪ.nəs]. In contrast to the other four respondents, #R5 pronounced it as ['kred.ɪtˌwɜː.ˌtɪ.nəs] where the substitution error (omission) occurred due to replacing the voiced interdental fricative [ð] with the voiceless interdental fricative [θ].

Respondents from the non-English Department, namely the accounting Department represented by #R6, #R7, #R8, #R9, and #R10 also still mispronounce the voiced interdental fricative [ð] in the term 'Creditworthiness'. The five respondents made segmental pronunciation errors at the level of substitution (omission), namely replacing the voiced interdental fricative [ð] with a voiceless alveolar stop [t], namely ['kred.ɪtˌwɜː.ˌtɪ.nəs].

The cause of errors in the pronunciation of dental fricative consonant sounds (dental fricative) by the three English Department respondents #R1,
Phonological processes of labiodental fricative consonant sounds (labiodental fricative) /f/ and /v/ are pronounced by students of the English and Non-English Department

The economic terminology below contains the voiceless labiodental fricative consonant sound [f] and the voiced dental fricative consonant sound [v]. The pronunciation process was carried out by English Department students, namely, #R1, #R2, and #R3, and continued with the pronunciation presentation carried out by non-English students, namely Accounting, #R6, #R7, #R8, #R9 and #R10.

Data 5

Inflation [ɪnˈflæʃn] [f]

The economic terminology above contains the voiceless labiodental fricative [f]. Of the respondents who pronounced the dental fricative sound in the words above, the five English language Department respondents #R1, #R2, #R3, #R4, and #R5 pronounced the voiceless labiodental fricative sound [f] in the word or terminology 'inflation' correctly, namely [ɪnˈfleɪʃn].

In this case, respondents from the non-English Department, namely Accounting, represented by #R6, #R7, #R8, and #R9 pronounce the voiceless labiodental fricative [f] in 'inflation' terminology correctly, [ɪnˈfleɪʃn]. Meanwhile, #R10 still pronounces the voiceless labiodental fricative [f] incorrectly, namely [ɪnˈfleɪʃn]. The respondent made a segmental error at the level of substitution (omission) where the voiceless labiodental fricative [f] changed to a bilabial voiceless plosive [p].

Omission

Data 6

Deficit ['defɪsɪt] [f]

The economic terminology above contains the voiceless labiodental fricative [f]. Of the respondents who pronounced the dental fricative sound in the words above, the five English Department respondents #R1, #R2, #R3, #R4, and #R5 pronounced the voiceless labiodental fricative sound [f] in the word or terminology 'deficit' correctly, namely ['defɪsɪt].

Meanwhile, among respondents from the Accounting Department, only one respondent, represented by #R10, pronounced the voiceless labiodental fricative [f] in the word or terminology 'deficit' incorrectly, namely ['depɪsɪt], where there was a segmental pronunciation error at the level of replacement (omission) namely replacing the voiceless labiodental fricative sound [f] with a voiceless bilabial plosive sound [p]. Meanwhile, the other four respondents, namely #R6, #R7, #R8, and #R9, pronounced the voiceless labiodental fricative [f] in the word or terminology 'deficit' correctly, namely ['defɪsɪt].

In this case, nine out of ten respondents were able to pronounce the voiceless dental fricative sound [f] correctly because respondents from both English and accounting Departments were familiar and aware of this sound. According to respondents, the sound [f] is also easier to pronounce because a lot of vocabulary in their mother tongue, namely Indonesian, contains this sound.

Data 7

Welfare ['wel.fer] [f]

The economic terminology above contains the voiceless labiodental fricative [f]. Of the respondents who pronounced the dental fricative sound in the words above, the five English language Department respondents #R1, #R2, #R3, #R4, and #R5 pronounced the voiceless labiodental
fricative sound [f] in the word or terminology 'deficit' correctly, which is ['wel.fer'].

Meanwhile, among respondents from the accounting Department, only one respondent, represented by #R10, pronounced the voiceless labiodental fricative [f] in the word or terminology 'welfare' incorrectly, namely ['wel.per], where there was a segmental pronunciation error at the replacement level. (omission), namely the replacement of the voiceless labiodental fricative sound [f] with a voiceless bilabial plosive sound [p]. Meanwhile, the other four respondents namely #R6, #R7, #R8, and #R9 pronounced the voiceless labiodental fricative [f] in the word or terminology 'welfare' correctly, namely ['wel.fer].

In this case, all of the respondents were able to pronounce the voiceless dental fricative sound [f] correctly because the respondents from both the English and accounting Departments were familiar with and aware of this sound. According to respondents, the sound [f] is also easier to pronounce because a lot of vocabulary in their mother tongue, namely Indonesian, contains this sound.

**Data 8**

Valuation ['væljuˈeɪʃn] [v]

The economic terminology above contains the voiced labiodental fricative [v]. Of the respondents who pronounced the dental fricative sound in the words above, three English Language Department respondents #R1, #R2, and #R3 pronounced the voiced labiodental fricative [v] incorrectly, namely ['væljuˈeɪʃn]. Meanwhile, the other two respondents represented by #R4 and #R5 were able to pronounce the voiced labiodental fricative [v] correctly, namely ['væljuˈeɪʃn].

In this case, a segmental pronunciation error occurred at the level of replacement (omission), namely replacing the voiced labiodental fricative [v] sound with the voiceless labiodental fricative sound [f]. The word or terminology 'valuation' which should correctly be pronounced ['væljuˈeɪʃn] becomes ['væljuˈeɪʃn].

One of the respondents from the non-English language Department, namely the Accounting, represented by #R9, succeeded in pronouncing the voiced labiodental fricative [v] in the term 'valuation' correctly, namely, ['væljuˈeɪʃn]. However, in contrast to the other four respondents represented by #R6, #R7, #R8, and #R10, they also still mispronounced the voiced dental fricative [v] in the terminology of 'valuation'. #R6, #R7, and #R10 pronounce the sound in the same way as respondents from the English Department, namely, ['væljuˈeɪʃn], where there is a segmental pronunciation error at the level of substitution (omission), namely replacing the voiced dental fricative [v] with a voiceless sound. labiodental fricative [f]. Meanwhile, #R8 has differences with other respondents, in pronouncing ['bæljuˈeɪʃn], where there is a segmental pronunciation error at the level of replacement (omission), namely replacing the voiced labiodental fricative sound [v] with the voiceless bilabial sound [b].

The cause of errors in the pronunciation of dental fricative consonant sounds (dental fricative) by the three English language Department respondents #R1, #R2, and #R3 was due to a lack of practice and awareness in pronouncing English sounds, especially the voiced dental fricative consonant sound [v]. Meanwhile, for #R4, #R5, and #R6, errors were based on a lack of understanding of phonetic sounds because the respondents did not have knowledge of the science of sounds in English. Apart from that, the mother tongue background of respondents from both departments, namely Indonesian and Sundanese, also resulted in a lack of familiarity with the pronunciation of these sounds so respondents were not fluent in pronouncing the voiced dental fricative [v] and shifted to other areas of speech which were easier and familiar to pronounce, namely, the voiceless dental fricative [f] because the acoustic sound similarity is very significant, Tyler et al (2019).

**Data 9**

Derivative area ['ˈdɪˈrɪvətɪv] [v]

The terminology above contains the voiced labiodental fricative [v]. The economic terminology above contains the voiced labiodental fricative [v]. Of the respondents who pronounced the dental fricative sound in the words above, two English Department respondents #R4, and #R5 pronounced the voiced labiodental fricative [v] correctly, namely ['dɪˈrɪvətɪv]. Meanwhile, the other two respondents represented by #R1, #R2, and #R3 still mispronounced the voiced labiodental fricative [v], namely ['dɪˈrɪʃtɪf].

In this case, a segmental pronunciation error occurs at the level of replacement (omission), namely replacing the voiced labiodental fricative [v] sound with the voiceless labiodental fricative sound [f]. The word or term 'derivative' which properly should be ['dɪˈrɪʃtɪv] is pronounced as ['dɪˈrɪʃtɪf].

Respondents from non-English language Departments, namely the Accounting Department represented by #R6, #R7, #R8, #R9, and #R10 also
still mispronounce the voiced labiodental fricative [v] in 'derivative' terminology which is pronounced as ['dɪˈrɪvətɪv']. In this case, segmental pronunciation errors also occur at the level of replacement (omission), namely replacing the voiced labiodental fricative [v] with the voiceless labiodental fricative [f]. The word or term 'derivative' which properly should be ['dɪˈrɪvətɪv] is pronounced as ['dɪˈrɪvətɪf].

The cause of errors in the pronunciation of dental fricative consonant sounds (dental fricative) by the three English language Department respondents #R1, #R2, and #R3 was due to a lack of practice and awareness in pronouncing English sounds, especially the voiced dental fricative consonant sound [v]. Meanwhile, for #R6, #R7, #R8, #R9, and #R10, errors were based on a lack of understanding of phonetic sounds because the respondents did not have knowledge of the science of sounds in English. Apart from that, the mother tongue background of respondents from both Departments, namely Indonesian and Sundanese, also resulted in a lack of familiarity with the pronunciation of these sounds so respondents were not fluent in pronouncing the voiced dental fricative [v] and shifted to other areas of speech which were easier and familiar to pronounce, namely, the voiceless dental fricative [f] because the acoustic sound similarity is very significant, Tyler et al (2019).

Causes of errors in pronunciation of the second consonant sound, fricative sound (dental fricative and labiodental fricative) /θ/, /ð/, /f/, and /v/, by students of the English and Non-English Department

Pronunciation errors can be caused by interlinguistic and extralinguistic factors. The interlinguistic factor in question is the existence of a language system or language difficulties that are different between the mother tongue and the second language being studied, also known as sound interference. This interference arises because bilinguals apply the sound unit system (phonemes) of the first language to the sound system of the second language, resulting in disturbances or deviations in the phonemic system of the recipient language.

CONCLUSION

Based on the findings regarding the pronunciation of interdental and labiodental fricative consonants by students from both English and Non-English Departments, several conclusions can be drawn. The study reveals significant variations in pronunciation accuracy, with English Department students generally demonstrating better proficiency in pronouncing these sounds compared to their Non-English Department counterparts.

A common error among Non-English Department students is the substitution or omission of target sounds. For example, interdental fricatives /θ/ and /ð/ are often replaced with the alveolar stop /t/, and the voiced labiodental fricative /v/ is sometimes replaced with the voiceless /f/. These substitutions suggest that students opt for phonetically simpler or more familiar sounds from their native languages.

The primary factors contributing to these errors include a lack of practice and awareness in pronouncing English sounds, especially among Non-English Department students. Additionally, the influence of the students' mother tongues, such as Indonesian and Sundanese, leads to difficulties in accurately articulating certain English phonemes. The significant acoustic similarity between certain English sounds and those in the students' native languages further exacerbates these errors.

Interference from the students' native language systems also plays a crucial role. This occurs when students apply phonetic rules from their first language to English, resulting in deviations from the target phonemic system. Such interlinguistic factors highlight the challenges of learning new phonemes not present in one's native language.

The findings emphasize the necessity of specialized language instruction and increased awareness of phonetic differences across languages. Implementing targeted teaching strategies and providing ample practice opportunities can significantly enhance pronunciation accuracy among students from diverse linguistic backgrounds. By focusing on the specific challenges faced by students from different academic disciplines and native languages, educators can develop more effective methods to improve English pronunciation skills in language learners.

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Pronunciation variability of English dental fricatives among Sundanese learners in different academic disciplines