

ISSN 2656-5323
e-ISSN 2808-2451

Vol 6 No. 2. Oktober 2023

BEYOND LINGUISTIKA

(Journal of Linguistics and Language Education)

**PRODI PENDIDIKAN BAHASA INGGRIS
FAKULTAS KEGURUAN DAN ILMU PENDIDIKAN
UNIVERSITAS BANDAR LAMPUNG**

Jl. Z.A. Pagar Alam No. 26, Labuhan Ratu Bandar Lampung, 35142

CONTENTS

THE CORRELATION BETWEEN MORPHOLOGICAL AWARENESS AND VOCABULARY MASTERY
Nadira Fayola, Sandra Nurhadian
.....63

ENHANCING ELEVENTH GRADE STUDENT SPEAKING SKILLS: IMPLEMENTING PROJECT-BASED LEARNING AT SMAN 9 BANDAR LAMPUNG
M. Bagas Tri Adi Yuda, Yanuar Dwi Prastyo
.....70

THE ANALYSIS OF STUDENTS' MOTIVATION AND READING COMPREHENSION OF SECOND GRADE STUDENTS AT SMA PERSADA BANDAR LAMPUNG
Natalya Catiwan
.....79

TRANSLANGUAGING PRACTICES IN THE ENGLISH ZONE: ENHANCING SPEAKING SKILLS AT SMA IRSYAADUL IBAAD ISLAMIC BOARDING SCHOOL
Dini Hidayati, Lenny Solo
.....88

EFFECTIVE PEDAGOGICAL APPROACHES FOR ADDRESSING DIVERSE LEARNING STYLES IN ENGLISH LANGUAGE INSTRUCTION AT SMA AL AZHAR 3, BANDAR LAMPUNG
Sherly Adelya Syahni, Ayu Wandira, Andriyan Muhammad Firdaus
.....96

ANALYZING MISPRONUNCIATION PATTERNS OF ALVEOLAR AND VELAR-ALVEOLAR CONSONANT CLUSTERS: A COMPREHENSIVE INVESTIGATION
Bayu Andika Prasatyo
.....102

Analyzing Mispronunciation Patterns of Alveolar and Velar-Alveolar Consonant Clusters: A Comprehensive Investigation

Bayu Andika Prasatyo
STBA Technocrat, Banten, Indonesia

Abstract

The present study explores the complex realm of pronunciation patterns demonstrated by Indonesian high school students who are engaged in the study of English as a Foreign Language (EFL). The research specifically concentrates on the clusters of alveolar and velar-alveolar consonants. The research endeavours to investigate the fundamental mechanisms that contribute to mispronunciation among learners, drawing upon phonological theories and frameworks of second language acquisition. A group of five high school students from SMA Persada Bandar Lampung, who possess a high level of English proficiency as a result of their extensive early education, were chosen as participants for the study. Their pronunciation of English words containing final alveolar-alveolar and velar-alveolar consonant clusters was thoroughly analysed through group interviews and recording sessions. The utilisation of phonetic transcriptions and error pattern detection has contributed to a more comprehensive comprehension of the impact of the individual's original language on the pronunciation of a second language. The results of the study provide insight into the difficulties encountered by Indonesian English as a Foreign Language (EFL) learners, namely in effectively managing the phonetic differences between English and Indonesian. The study offers useful insights for language education tactics by clarifying these pronunciation issues, hence promoting more efficient language acquisition ways.

Keywords: *Pronunciation patterns; Indonesian EFL learners; Consonant clusters; Phonological theories; Second language acquisition.*

Introduction

The English language has emerged as an essential instrument in the international sphere, functioning as the predominant mode of communication both across national boundaries and inside local societies (Grabe, 2007; Sakhiyya, 2019). The global recognition of its role as a universal language has motivated individuals across the globe, especially those residing in nations such as Indonesia, to embark on the challenging endeavour of acquiring proficiency in it. The growing significance of English proficiency in Indonesia arises from its anticipated function in enabling connection with individuals from different countries and satisfying the requirements of an interconnected world (Panggua et al., 2017; Sahiruddin et al., 2020; Zein et al., 2020). Consequently, endeavours to cultivate proficiency in the English language commence throughout the early stages

of childhood, wherein parents frequently introduce it in conjunction with the mother tongue. Formal education serves to strengthen this process, since English assumes the role of the medium of teaching across all levels of schooling. Notwithstanding these collective endeavours, learners face a multitude of obstacles, with pronunciation appearing as a substantial impediment in the pursuit of English fluency (Mahmood & Jamal, 2017).

Pronunciation plays a pivotal role in facilitating effective communication, exerting a significant impact on the perception and comprehension of speakers by their audience. The crucial significance of oral communication and speaker evaluation, underscoring its impact (Afshari & Ketabi, 2016; Moedjito, 2016). Nevertheless, the attainment of fluency in pronunciation presents a significant challenge for those learning English as a Foreign Language

(EFL). This difficulty arises from the intricate nature of human speech sounds, which is further complicated by variables such as location and method of articulation (Rodriguez et al., 2020). Furthermore, the impact of learners' native language, which adds further complexity by influencing pronunciation patterns and presenting distinct obstacles in different linguistic settings (Moedjito et al., 2019; Rodriguez et al., 2020).

In the middle of these intricate circumstances, Indonesian learners of English as a Foreign Language (EFL) have difficulties in pronunciation that arise from disparities between the English and Indonesian sound systems. The impact of mother tongue interference on learners' pronunciation ability has been extensively examined in several studies (Liang, 2015; Moedjito, 2016). Interference can be observed in diverse manners, ranging from the replacement of English phonemes with Indonesian counterparts to the exclusion of phonemes that are not present in the individual's mother tongue (Nkhi & Lebona, 2023; Soomro, 2018). The presence of mispronunciations, which frequently stem from phonological variations between languages, highlights the necessity for focused research aimed at elucidating distinct pronunciation patterns and their fundamental origins among Indonesian language learners (Li, 2016; Noviyenty & Putri, 2021).

Phonology, a branch of linguistics, offers a conceptual foundation for comprehending these difficulties in pronunciation. Phonetics is the study of the systematic arrangement of sounds in languages, with a specific emphasis on the functioning and interaction of sounds within the language's structure. This encompasses their dispersion, arrangement, and diversity (Ishaq, 2018). Phonemes, allophones, phonological principles, syllable structure, and phonological processes are fundamental ideas in the field of phonology. Phonology is essential for comprehending the fundamental organisation and arrangement of sounds in language, facilitating the examination and depiction of how languages use sounds to communicate meaning (Indrayadi et al., 2021; Nurjamin, 2020).

The categorization of the English consonant sound system, which is based on the site of articulation, mode of articulation, and voicing, provides additional insight into the distinctions between English and Indonesian phonetics. The categorization of consonants in English, including bilabial, labiodental,

interdental, alveolar, post-alveolar, retroflex, palatal, velar, and glottal consonants, offers valuable insights on the unique phonetic features and articulatory properties of these sounds (Moedjito et al., 2019; Rodriguez et al., 2020). Likewise, an examination of the manner in which words are articulated and pronounced aids in elucidating the phonetic subtleties that exist between the two languages.

This study seeks to offer a comprehensive comprehension of the pronunciation difficulties encountered by Indonesian English as a Foreign Language (EFL) learners, with a specific emphasis on the mispronunciation patterns associated with alveolar and velar-alveolar consonant clusters. The research technique and analysis is guided by this theoretical framework, which ensures a comprehensive and deep investigation of the topic matter.

Consonant clusters, pivotal to the study of phonetics and language acquisition, represent a fascinating aspect of pronunciation acquisition, particularly in the context of English as a second language for Indonesian learners. In linguistics, consonant clusters are defined as two consonants pronounced simultaneously, delineating them from mere combinations of letters. This distinction underscores the complex articulatory processes involved in producing these clusters, wherein two distinct consonantal sounds merge to form a single unit of speech (Zhou et al., 2020). However, mastering the pronunciation of consonant clusters entails navigating various phonotactic constraints, which dictate the permissible sequences of segments within a language's structure.

Phonotactic constraints delineate the permissible arrangements of consonants and syllables within a language. In English, consonant clusters can occupy initial, medial, or final positions within a word, with each position bearing its own articulatory challenges (Irawan et al., 2023). For instance, words like "play" and "clamp" illustrate consonant clusters in initial positions, while "hamster" and "handsome" exemplify medial clusters, and "desk" and "bump" showcase final clusters. Additionally, consonant cluster reduction, observed in various English dialects, further complicates pronunciation, often leading to the deletion of medial consonants, as seen in the reduction of "didn't" to "dɪtn."

In contrast to the phonological landscape of English, Indonesian exhibits fewer consonant clusters, governed by distinct phonotactic constraints. The Indonesian phonological system permits consonant clusters in onset or coda positions, albeit with limited combinations compared to English (Derwing & Rossiter, 2002). These differences underscore the phonological challenges faced by Indonesian learners when navigating English consonant clusters, necessitating a nuanced understanding of second language acquisition (SLA) theories.

Second language acquisition theories shed light on the underlying processes driving mispronunciation among learners. Interlingual or interference mispronunciation occurs when learners attempt to map sounds from their native language onto those of the target language, often resulting in errors influenced by the phonological system of their first language (M. J. Munro & Derwing, 1995; Pallier et al., 2001; Scarcella & Oxford, 1994). Conversely, intralingual mispronunciation stems from learners' failure to observe boundaries within the target language, leading to overgeneralization errors and other linguistic deviations (Kosasih, 2021; M. Munro & Derwing, 2006).

By integrating phonological theories and SLA frameworks, this study aims to unravel the intricate interplay between linguistic structures and learner proficiency. Through a comprehensive analysis of mispronunciation patterns among Indonesian EFL learners, this research endeavors to illuminate the underlying mechanisms driving pronunciation errors, thereby informing pedagogical practices and fostering more effective language instruction strategies.

Method

The current study aims to investigate the pronunciation patterns demonstrated by a sample of five Indonesian high school students enrolled at SMA Persada Bandar Lampung. The selection criteria for these students were based on their extensive exposure to the English language, starting from elementary school and, in some cases, even kindergarten. These students predominantly use Indonesian as their mother tongue and engage with it on a daily basis. It is anticipated that these students, having developed English language skills over an extended period, would demonstrate a certain level of proficiency in articulating English vocabulary. To ensure a

comprehensive understanding of the terminology, the research utilizes English vocabulary sourced from the English module of module of Advanced English sourced from the English module of Advanced English Class XII.

The study aims to elucidate the fundamental patterns and distinctions in pronunciation between English and Indonesian by adopting a phonological approach. Phonological norms play a crucial role in understanding these distinctions, providing a framework for analyzing the influence of the native language on the pronunciation of English words, particularly in relation to terminal consonant clusters (Kosasih, 2021).

The principal methods employed for data collection included group interviews and recording sessions. Group interviews were conducted to assess the participants' proficiency in their native Indonesian language, with a specific focus on distinguishing between the national language and their mother tongue. Subsequently, participants were recorded as they read passages from Fokus Bahasa Inggris Kelas X, their English module, which included English words featuring final alveolar-alveolar and velar-alveolar consonant clusters. The selection of materials aimed to foster a sense of familiarity while presenting the words in typical phrases to accurately capture pronunciation nuances.

Participants were instructed to meticulously and gradually document their readings to ensure accuracy. The recordings were transcribed for analysis using phonetic standards specific to North American English (NAme). High-quality recordings were utilized to facilitate precise transcription of phonetic information, crucial for identifying speech patterns accurately. The data analysis process followed a systematic methodology, comprising three primary stages: phonetic transcription, identification of error patterns, and determination of underlying causes of mispronunciations. Phonetic transcriptions of participants' pronunciations were diligently recorded, distinguishing between accurate (C) and inaccurate (IC) pronunciations. A comparative analysis of accurate transcriptions and participants' renditions was conducted to identify error patterns, thereby providing valuable insights into the influence of the mother tongue on second language (L2) pronunciation (Kosasih, 2021; Levis et al., 2016; Li, 2016).

The primary objective of this study is to provide a comprehensive understanding of the various factors contributing to mispronunciation among Indonesian English as a Foreign Language (EFL) learners. By illuminating the complex relationship between linguistic structures and learner competency, this research aims to offer valuable insights that can inform language instruction tactics and enhance language acquisition efficiency (Ishaq, 2018).

Findings and Discussion

The research delved into the distribution and pronunciation of English final alveolar-alveolar and velar-alveolar consonant clusters, focusing specifically on those identified in reading materials utilized by the participants. The examination of these clusters aimed to assess the participants' familiarity with and ability to pronounce such clusters accurately. Drawing from Class XI advanced level English modules, the study identified twenty-five English words featuring final alveolar-alveolar and velar-alveolar consonant clusters across four stories: "Monkey and Crocodile," "The Story of Jhony," "Momotaro or Little One Preaching," and "Nyai Bagendit."

Among the twenty-five English words, the majority comprised two alveolar-alveolar consonants as the final consonant cluster, with only one word consisting of two velar-alveolar consonants in the cluster. Additionally, three words featured three consonants in the final consonant cluster. Specifically focusing on English words with final alveolar-alveolar consonant clusters, the study identified twenty-one instances within the reading materials.

Within this category, three distinct patterns were observed, one of which involved stop-fricatives alveolar consonant clusters. These clusters were exemplified in sentences extracted from the reading materials, such as "One night when the people of Jhony's village are sleeping, the Dark Land knights attacked his village" (from "The Story of Jhony") and "Besides this, he made every kind of preparation for his journey to the island of the devils and set out" (from "Momotaro or Little Preaching"). These instances demonstrated the varied contexts in which English final alveolar-alveolar consonant clusters were encountered throughout the reading materials, providing valuable insight into the participants' pronunciation patterns and proficiency levels.

Table 1 Phonetic Transcription of English Final Fricatives Stop Alveolar Consonant Clusters

No	English Words	Phonetic Transcription
1	Parents	[peərənst]
2	Pressed	[prest]
3	Fast	[fæst]
4	Last	[læst]
5	Closed	[kloʊzd]

Referring to the reading materials provided, six words featuring English final nasal-stop alveolar consonant clusters were identified. These clusters were present in excerpts from various stories, including "Monkey and Crocodile," "The Story of Jhony," "Momotaro or Little Preaching," and "Nyat Bagendit." Specifically, the sentences containing these words are as follows:

In the story "Monkey and Crocodile," one instance of the nasal-stop alveolar consonant cluster appears in the sentence, "So, the crocodile turned around and swam back to the bank of the river" (p. 9).

Similarly, within "The Story of Jhony," two occurrences of these clusters were found. The sentence "Once upon a time, there was a village in South Dream Island" (p. 17) contains one instance, while "Jhony and his parents lived in a fishermen village" (p. 17) includes another.

Additionally, in "Momotaro or Little Preaching," a sentence featuring the nasal-stop alveolar consonant cluster reads, "Besides this, he made every kind of preparation for his journey to the island of the devils and set out" (p. 39).

These findings demonstrate the presence of nasal-stop alveolar consonant clusters in various contexts within the provided reading materials. Such clusters contribute to the phonetic

complexity of English pronunciation, highlighting the importance of understanding and correctly articulating these sounds for effective communication.

Table 2 Phonetic Transcription of English Final Nasal-Stop Alveolar Consonant Clusters

No	English Words	Phonetic Transcription
1	Around	[əraʊnd]
2	Island	[aɪlənd]
3	And	[ænd]
4	Kind	[kʌɪnd]

In the reading material, two instances of English words ending with nasal-fricatives alveolar consonant clusters are identified. The first occurrence is found in "The Story of Jhony," specifically in the sentence "Once upon a time, there was a village in South Dream Island." The second instance occurs in "Nyai Bagendit" with the sentence "Since then, people named the lake as Situ Bagendit." Both sentences exemplify the utilization of nasal-fricatives alveolar consonant clusters within the context of narrative storytelling.

sound [ns]. Similarly, in "Nyai Bagendit," the phrase "Situ Bagendit" showcases the use of the nasal-fricatives alveolar consonant cluster in the word "Bagendit." The phonetic transcription of this word depicts the pronunciation as [bæɡɛndɪt], with the final consonant cluster "ndit" being pronounced as [nd], representing the nasal-fricatives combination.

In "The Story of Jhony," the phrase "Once upon a time" features the nasal-fricatives alveolar consonant cluster in the word "once." The phonetic transcription of this word reveals the pronunciation as [wʌns], where the final consonant cluster "nce" is articulated with a nasal-fricatives combination, representing the phonetic

These instances illustrate how nasal-fricatives alveolar consonant clusters are integrated into the narrative flow of the reading material. The phonetic transcriptions provide a clear representation of how these clusters are pronounced within the context of the sentences. Overall, the presence of these clusters contributes to the phonetic richness of the English language used in the storytelling, enhancing the auditory experience for the reader.

Table 3 Phonetic Transcription of English Final Nasal-Fricatives Alveolar Consonant Clusters

No	English Words	Phonetic Transcription
1	Once	[wʌns]
2	Since	[sɪns]

In the reading material analyzed, five English words ending with the laterals-stop consonant cluster were identified. These words were distributed across various sentences within the text. Two instances occurred in the sentence, "Because I didn't bring my heart with me," found in the context of a story involving a monkey and a crocodile (p.9). Another occurrence appeared in "A shark came close to him. He tried to swim avoiding the shark as fast as possible but he failed and at last the shark swallowed him," extracted from "The Story of Johnny" (p.17).

Furthermore, the word "Momotaro" featured in two sentences within the text. In one instance, it appeared in the sentence, "Momotaro! What have you there hanging at your belt?" (p.93). In the other instance, the word appeared in the sentence, "... but they pressed still inwards and at last encountered the chief of the devils," found in the story "Momotaro or Little Preaching" (p.39). These instances illustrate the varied contextual usage of words ending with the

laterals-stop consonant cluster within the reading material.

The distribution of these words across different stories and contexts highlights their significance in conveying meaning within the narratives. Each occurrence contributes to the overall narrative structure and serves to advance

Table 4 Phonetic Transcription of English Final Lateral-Stop Alveolar Consonant Clusters

No	English Words	Phonetic Transcription
1	Heart	[ha:rt]
2	Failed	[feɪld]
3	Belt	[belt]
4	Encountered	[ɪnkaʊntərd]

In the narrative "The Story of Jhony," a singular English word featuring a final velar-alveolar consonant cluster is identified within the text. Although other words in the narrative contain velar-alveolar consonant clusters, they are typically part of larger clusters composed of three consonants. The specific word in question is situated towards the conclusion of the sentence, representing a culmination of tension within the storyline. The phrase depicts a pivotal moment in the narrative, where the tranquility of Jhony's village is disrupted by the sudden onslaught of Dark Land knights. This climactic event serves as a crucial turning point in the narrative, setting the stage for subsequent developments.

The identified word exemplifies the juxtaposition of velar and alveolar stops, forming a final consonant cluster that encapsulates the intensity and abruptness of the knights' attack. This linguistic feature not only contributes to the narrative's dramatic effect but also highlights the

Bayu Andika Prasatyo
the plot or depict specific actions or events. Through these examples, readers encounter the versatility of English words featuring laterals-stop consonant clusters and gain insight into their role in shaping the textual landscape of the analyzed reading material.

complexity of English phonetics and pronunciation.

To provide a comprehensive analysis, the phonetic transcription of the identified word is presented in a table format, ensuring clarity and precision in the representation of its pronunciation. This transcription serves as a valuable resource for linguistic analysis, enabling researchers to delve deeper into the phonological intricacies of the English language.

Overall, the presence of velar-alveolar consonant clusters in the narrative underscores the importance of phonetic analysis in understanding linguistic structures and narrative dynamics. By examining specific linguistic features within context, researchers can unravel deeper layers of meaning embedded within literary texts, enriching our comprehension of language and its expressive capabilities.

Table 5 Phonetic Transcription of English Final Velar -Alveolar Consonant Clusters

No	English Words	Phonetic Transcription
1	Attacked	[ətækt]

This study examines English words ending with three consonants to form final consonant clusters, featuring either alveolar-alveolar or velar-alveolar consonants. Among the selected English words, five instances of final consonant clusters consisting of three consonants were identified. These occurrences were found in various narratives, including "Monkey and

Crocodile," "The Story of Jhony," "Momotaro or Little Preaching," and "Nyai Bagendit."

In the narrative "Monkey and Crocodile," two instances of three-consonant final clusters were observed. The sentence "Because I didn't bring my heart with me" exemplifies one occurrence, highlighting the final consonant cluster in the word "didn't." Another instance is

evident in the sentence "So, the crocodile turned around and swam back to the bank of the river."

Similarly, in "The Story of Jhony," the phrase "Jhony and his parents lived in a fishermen village" showcases a final consonant cluster in the word "parents," reflecting the alveolar-alveolar combination. Conversely, in "Momotaro or Little Preaching," the sentence "they pressed still inwards and at last encountered the chief of the devils" presents a final consonant cluster in the word "encountered," featuring a velar-alveolar combination.

Lastly, in "Nyai Bagendit," the sentence "Nyai Bagendit immediately asked her to go" demonstrates a final consonant cluster in the word "asked," characterized by an alveolar-alveolar combination. These instances underscore the occurrence of three-consonant final clusters in English words and their presence in various narrative contexts, illustrating the complexity of pronunciation patterns among Indonesian EFL learners.

Table 6 Phonetic Transcription of English Word with Three Consonant as Final Consonant Clusters

English Words	Phonetic Transcription	Consonants
Didn't	[dɪdnt]	Stop- Nasal- Stop alveolar
Parents	[peərənst]	nasal- stop- fricative alveolar
Inwards	[ɪnwɹədʒ]	Lateral- nasal- fricative alveolar
Asked	[æskt]	Fricative alveolar-stop velar-stop alveolar

During the three sessions, the participants collectively uttered 250 words, averaging 25 words per participant, with a total of (?) pronunciation errors detected. Notably, some participants attempted to simplify pronunciation by either omitting the final consonant in a cluster or substituting consonants. A closer examination of these errors, particularly concerning the distribution of consonant clusters, aids in understanding the underlying patterns.

remainder erred in their pronunciation. Among the nine instances of mispronunciation, six participants rendered it as [nɔlt], while two others articulated it as [nɔls]. Notably, participant Pâ's mispronunciation stemmed from a focus on the letter <g> in "knights," resulting in the pronunciation [naɪks], as evidenced in the appendix detailing the participants' results.

When addressing mispronunciations of English words featuring final alveolar-alveolar consonant clusters, it becomes evident that certain patterns emerge.

Similarly, in the word "besides" [besaɪdz], none of the participants pronounced it accurately. The most prevalent mispronunciation involved the omission of [z] as the final consonant in the cluster, coupled with the voiced [d] being substituted with the voiceless [t]. Consequently, the frequently observed mispronunciation was [bɪsaɪt], with some participants also pronouncing it as [bɪsaɪts].

For instance, in the word "knights" [naɪts], only six out of the participants managed to pronounce the cluster correctly, while the

Table 7 Phonetic Transcription of English Final Stop -Fricative Alveolar Consonant Clusters

No	English Words	Phonetic Transcription
1	Parents	

In the analysis of fricative stops, the findings revealed a total of nine

mispronunciations across the English words "fast" and "last." Specifically, "fast" exhibited

Beyond Linguistika

ISSN: 1550564779 (online)

five instances of mispronunciation, predominantly characterized by the omission of the alveolar stop consonant [t], resulting in pronunciations such as [fest]. Similarly, "last" witnessed four instances of mispronunciation, with participants omitting the final consonant [t], leading to renditions like [læst]. Notably, the absence of voiced consonants in these clusters facilitated relatively easier pronunciation for the participants.

Contrastingly, the word "pressed" yielded four correct pronunciations, articulated correctly by participants P4, P5, P12, and P14. However, one participant deviated from the correct pronunciation, substituting the intended [st] with [sd]. Conversely, none of the participants accurately pronounced "closed" [kloozd], indicating a common mispronunciation pattern across the group.

Further analysis of the word "richest" [nt/ast] revealed three correct pronunciations by participants P2 and P6. This phenomenon mirrored the mispronunciation trend observed in fricative stops, where voiced consonants were frequently replaced by their voiceless counterparts. Specifically, voiced fricative [z] shifted to voiceless fricative [s], while voiced stop [d] transformed into voiceless stop [t]. Additionally, some participants exhibited mispronunciations characterized by the omission of the final consonant in the cluster, evident in renditions such as [pres].

In consonant cluster analysis, consonant clusters are a notable focus due to their significance in phonetics and language acquisition, particularly among Indonesian learners of English as a Foreign Language (EFL). Consonant clusters, defined as two consonants pronounced simultaneously, are distinct from mere letter combinations, highlighting the intricate articulatory processes involved (Zhou et al., 2020). Mastering the pronunciation of these clusters involves

Bayu Andika Prasatyo

navigating various phonotactic constraints, which dictate the permissible sequences of segments within a language's structure (Irawan et al., 2023).

Phonotactic constraints delineate the permissible arrangements of consonants and syllables within a language. In English, consonant clusters can occupy initial, medial, or final positions within a word, each presenting unique articulatory challenges (Irawan et al., 2023). For instance, "play" and "clamp" illustrate initial clusters, "hamster" and "handsome" showcase medial clusters, while "desk" and "bump" exhibit final clusters. Additionally, consonant cluster reduction, observed in various English dialects, complicates pronunciation, often resulting in medial consonant deletion, as seen in the reduction of "didn't" to "dɪtn."

In contrast to English, Indonesian exhibits fewer consonant clusters, governed by distinct phonotactic constraints (Derwing & Rossiter, 2002). While Indonesian permits clusters in onset or coda positions, the combinations are limited compared to English. These differences underscore the phonological challenges faced by Indonesian learners when navigating English consonant clusters, necessitating a nuanced understanding of second language acquisition (SLA) theories.

Second language acquisition theories elucidate the underlying processes driving mispronunciation among learners. Interlingual or interference mispronunciation occurs when learners map sounds from their native language onto those of the target language, influenced by the phonological system of their first language (M. J. Munro & Derwing, 1995; Pallier et al., 2001; Scarcella & Oxford, 1994). Conversely, intralingual mispronunciation stems from learners' failure to observe boundaries within the target language, resulting in overgeneralization errors and other linguistic deviations (Kosasih, 2021; M. Munro & Derwing, 2006).

Table 8 Phonetic Transcription of English Final Fricative Stop Alveolar Consonant Clusters

No	English Words	Phonetic Transcription
1	Parents	

In examining the pronunciation patterns of nasal-stop alveolar consonant clusters among the participants, it was observed that a consistent

mispronunciation trend emerged. The majority of participants demonstrated a tendency to omit the final consonant of the cluster, resulting in

inaccuracies in pronunciation. A thorough analysis of the participants' results revealed that only two instances of correct pronunciation were noted across the dataset.

cluster, mirroring the trend observed in the previous set of words.

One prevalent mispronunciation pattern involved the omission of the stop consonant [d] in words such as "around," "land," and "kind." None of the participants produced the correct pronunciation for these words, indicating a uniform tendency to overlook the final consonant. Consequently, the voiced stop alveolar [d] underwent reduction, leading to pronunciations such as [əarʊn], [læn], and [kʌIn].

Additionally, another correct pronunciation was noted for the word "arrogant," pronounced as [ærəgətŋ] by P7. In contrast, the other participants, excluding P7, deviated from the correct pronunciation by omitting the final stop [t] consonant. This consistent mispronunciation pattern further underscores the participants' tendency to overlook the final consonant in nasal-stop alveolar consonant clusters.

However, it is noteworthy that one participant, P6, successfully pronounced the word "island" as [allənd], accurately articulating all the vowels and consonants in the cluster. Conversely, the remaining participants exhibited a consistent mispronunciation pattern by omitting the final stop [d] consonant in the

Overall, the findings highlight a recurring mispronunciation trend among the participants, characterized by the omission of the final stop consonant in nasal-stop alveolar clusters. These observations underscore the importance of targeted instruction and practice to address such pronunciation challenges effectively, ultimately enhancing the participants' English language proficiency.

Table 9 Phonetic Transcription of English Final Nasal-Stop Alveolar Consonant Clusters

English Words	C	IC
1	Parents	

In the analysis of nasal fricatives, the findings reveal a limited number of mispronunciations among the participants. Specifically, the word "once" [wʌns] witnessed three instances of mispronunciation by participants P4, P6, and P11. In these cases, the final fricative alveolar [s] was erroneously replaced with the fricative palatal [ʃ]. This mispronunciation occurred in conjunction with the following word "upon" [ə'pʊn], which these participants pronounced as [ʃjʊpʊn], thus influencing their pronunciation of "once" [wʌns]. However, it is noteworthy that the majority of participants demonstrated correct pronunciation of the final consonant cluster in "once" [wʌns].

this case, P13 omitted the fricative alveolar [s], resulting in a pronunciation of [sain]. Furthermore, an examination of the phonetic transcription indicates that P13 also encountered difficulties with the vowel pronunciation in the word. Conversely, the remaining participants successfully articulated the consonant cluster in "since" [sɪns], demonstrating accurate pronunciation.

Similarly, the word "since" [sɪns] experienced only one instance of mispronunciation, attributed to participant P13. In

Overall, the findings suggest that while mispronunciations of nasal fricatives occurred in a limited capacity among the participants, they were primarily isolated incidents. The majority of participants displayed proficiency in pronouncing the final consonant clusters in the words "once" and "since," indicating a generally accurate grasp of these phonetic structures.

Table 10 General Summary of Participants Result of English Final Nasal-Fricative Alveolar Consonant Clusters

English Words	C	IC
1	Parents	

Through an examination of the pronunciation patterns of consonant clusters among the participants, a number of noteworthy observations arise, which are consistent with the linguistic intricacies described in the introduction and literature review. Consonant clusters, like as those observed in the word "told" [tɔld], demonstrate consistent patterns of mispronunciation among Indonesian English as a Foreign Language (EFL) learners. These patterns can be attributed to the impact of the participants' phonological system in their first language (Mahmood & Jamal, 2017; Moedjito et al., 2019). According to Sakhiyya (2019) and Zein et al. (2020), a significant number of participants exhibit a proclivity to replace the voiced stop alveolar [d] with the voiceless stop alveolar [t], leading to variations such as [tɔlt] or [tɔt], despite being exposed to English from a young age.

In a similar vein, it has been observed that individuals consistently display mispronunciation patterns in the term "failed" [fɛland], which can be attributed to the phonological limitations imposed by their mother tongue (Moedjito, 2016; Noviyenty & Putri, 2021). The majority of participants commonly substitute the voiced stop alveolar [d] with the voiceless stop alveolar [t], suggesting a tendency to apply phonetic norms from their native language to English pronunciation (Liang, 2015; Soomro, 2018). In addition, the incorrect inclusion of unnecessary phonemes, such as schwa [ə] or lax central vowel [ɪ], indicates a deviation from the intended pronunciation caused by the impact of interference from the first language (Nkhi & Lebona, 2023; Noviyenty & Putri, 2021).

On the other hand, the participants' proper pronunciation of consonant clusters is evident in terms such as "heart" [hɜrt] and "belt" [bɛlt],

indicating their proficiency in managing certain phonetic structures (Panggua et al., 2017; Sahiruddin et al., 2020). This finding provides evidence for the proposition that Indonesian English as a Foreign Language (EFL) learners may face challenges in certain pronunciation elements, but demonstrate proficiency in others, which can be attributed to factors such as familiarity and exposure (Grabe, 2007; Mahmood & Jamal, 2017).

The research review conducted by Moedjito et al. (2019) and Rodriguez et al. (2020) highlights the influence of first language phonological principles on second language pronunciation, as seen by the persistent mispronunciation patterns identified in specific consonant clusters. This finding aligns with the theoretical framework proposed in the literature study. This study offers valuable insights into the underlying mechanisms that cause pronunciation errors among Indonesian EFL learners by combining phonological theories and second language acquisition frameworks. The findings can inform pedagogical practices and help develop more effective language instruction strategies (Afshari & Ketabi, 2016; Kosasih, 2021; Munro & Derwing, 2006).

To summarise, this study's findings provide insight into the complex relationship between linguistic structures, the effect of one's first language, and the proficiency of learners in acquiring English pronunciation among Indonesian EFL learners. This research enhances our comprehension of the difficulties encountered by learners and provides significant insights for language instruction and curriculum development by conducting a detailed analysis of mispronunciation patterns (Ishaq, 2018; Nurjamin, 2020).

Table 11 General Summary Of Participants Result Of English Final Lateral -Stop Alveolar Consonant Clusters

English Words	C	IC
l	Parents	

The results pertaining to the misarticulation of English words containing final velar-alveolar consonant clusters among Indonesian learners of English as a Foreign Language (EFL) are consistent with the existing difficulties emphasised in the scholarly literature. Indonesian learners face challenges in pronunciation due to differences between the

English and Indonesian sound systems, as the importance of English proficiency on a global scale increases (Grabe, 2007; Moedjito et al., 2019; Rodriguez et al., 2020; Sakhiyya, 2019). The objective of this study was to provide a comprehensive understanding of the unique pronunciation patterns and their underlying sources among Indonesian learners. The research

was driven by established phonological theories and second language acquisition frameworks, as referenced by Li (2016) and Noviyenty & Putri (2021).

Significant patterns in the pronunciation of words containing final velar-alveolar consonant clusters were observed in the study of the participants. Although the term "attacked" was the only word associated with this cluster, only two participants, identified as P14 and P15, correctly expressed the cluster as [taekt], which supports previous research suggesting that the mother tongue has an impact on pronunciation proficiency (Liang, 2015; Moedjito, 2016). Nevertheless, a significant proportion of the participants demonstrated instances of mispronunciation, with the most commonly seen mistake being the omission of the voiceless stop alveolar [t], leading to a pronunciation of [tack]. These findings align with research that emphasises the influence of native language interference on pronunciation (Nkhi & Lebona, 2023; Soomro, 2018).

In addition, it was observed that a single participant exhibited a deviation from the accurate pronunciation by replacing the anticipated voiceless stop [t] with the voiced stop alveolar [d]. The aforementioned discrepancy highlights the intricate nature of managing phonological differences across different languages (Moedjito et al., 2019; Rodriguez et al., 2020). The results highlight the difficulties encountered by Indonesian English as a Foreign Language (EFL) learners in achieving proficiency in English pronunciation. Specifically, they struggle with effectively negotiating consonant clusters that are influenced by phonological variations across different languages (Derwing & Rossiter, 2002). These observations enhance our comprehension of the fundamental processes that cause pronunciation mistakes, providing valuable guidance for teaching methods that aim to improve language teaching and competency (Kosasih, 2021; M. Munro & Derwing, 2006).

Table 12 General Summary of Participants Result of English Final Velar- Alveolar Consonant Clusters

English Words	C	IC
l	Parents	

The study's results shed light on the difficulties encountered by Indonesian learners of English as a Foreign Language (EFL) when it comes to pronouncing English words that consist of three consonants, forming the final consonant cluster. These findings are consistent with the broader context described in the introduction and literature review (Grabe, 2007; Liang, 2015; Mahmood & Jamal, 2017; Moedjito, 2016; Noviyenty & Putri, 2021; Sakhiyya, 2019). The examination of the pronunciation patterns exhibited by the participants unveiled a regular occurrence of mispronunciations, which can be mostly attributed to the phonotactic limitations that differ between English and Indonesian.

Initially, the participants faced issues when encountering words such as "didn't" and "turned," particularly in relation to the final consonant cluster (Irawan et al., 2023; Rodriguez et al., 2020). The majority of participants failed to include the last stop alveolar consonant [t], leading to mispronunciations such as [didn] and [tson]. This can be attributed to the impact of

Indonesian phonotactic limitations, which commonly restrict the formation of final consonant clusters to two consonants (Derwing & Rossiter, 2002).

Similarly, participants often excluded or modified consonants within the cluster when using words such as "parents" and "inwards," suggesting difficulties with the arrangement of alveolar and velar consonants (Moedjito et al., 2019; Rodriguez et al., 2020). As an illustration, the mispronunciation of "parents" as [pearans] was frequently seen, indicating challenges with the final consonant clusters that consist of stops and fricatives. This also emphasises the impact of intralingual factors on the correctness of pronunciation (Kosasih, 2021).

Furthermore, the participants encountered difficulties when encountering words such as "asked," demonstrating instances of mispronunciation, including the omission of the final stop alveolar [t] or the incorrect switching of consonants [s] and [k] (M. Munro &

Beyond Linguistika

ISSN: 1550564779 (online)

Derwing, 2006; Pallier et al., 2001). The errors exhibited interlingual interference, which refers to the influence of the original language's features on pronunciation, as well as intralingual errors, which involve the incorrect application of pronunciation norms in the target language (M. Munro & Derwing, 2006).

Subsequent examination unveiled that the level of familiarity that participants had with certain English words had an impact on their accuracy in pronouncing them, with increased exposure resulting in more precise pronunciation (Karlina et al., 2020). Words such as "heart" were spoken with greater precision as a result of regular exposure in songs and media, in contrast to less familiar words like "around."

The aforementioned research highlights the complex relationship among language structures, phonotactic limitations, and learner competence in influencing the precision of pronunciation (Afshari & Ketabi, 2016; Moedjito, 2016). It is imperative to comprehend the distinct difficulties encountered by Indonesian English as a Foreign Language (EFL) learners when it comes to pronouncing English ending consonant clusters. This understanding is essential in order to formulate focused pedagogical approaches that can effectively improve pronunciation competency (Sahiruddin et al., 2020). Educators can enhance their ability to assist learners in overcoming pronunciation difficulties and attaining higher levels of linguistic correctness by considering both interlingual and intralingual elements that contribute to mispronunciation.

Conclusion

Based on the findings of this study, it is evident that elements of the participants' mother tongue or first language significantly influence their use of the second language, as demonstrated by the 289 mispronunciations out of 405 pronunciations analyzed (27 words x 15 participants).

This study sheds light on the mispronunciation of English final alveolar-alveolar and velar-alveolar consonant clusters, categorizing them as phonological errors. The investigation into the background of these mispronunciations is closely related to the speech sound system and constraints of phonological rules. Additionally, this study explores the relationship between errors and language

Bayu Andika Prasatyo

acquisition within the framework of a phonological approach.

Analysis reveals two primary error categories contributing to the mispronunciations of consonant clusters by participants. Interlingual and interference errors account for 284 mispronunciations, while intralingual errors contribute five mispronunciations.

Interlingual errors emerge as the most common errors in this study. Participants frequently omit or delete the last consonant of the consonant cluster and may also change voiced consonants into voiceless ones. Such changes reflect the influence of Indonesian phonotactic constraints, where voiced stop consonants are often reduced in final word positions. Participants also exhibit a tendency to add schwa or vowels when pronouncing English words with certain letter patterns, reflecting predicted challenges for Indonesian native speakers. Moreover, some participants swap consonants in consonant clusters to align with Indonesian phonotactic constraints, such as allowing /ks/ clusters at the end of words.

Intralingual errors also contribute to participant mispronunciations, with five instances observed in this study. These errors include mispronouncing the letter <d> in certain words and altering consonant clusters due to the influence of following vowels.

Based on the analysis and conclusions drawn from this study, several suggestions can be made for both students and English teachers at SMA Santa Maria Yogyakarta.

For students, it is recommended to actively engage in English language learning activities to improve pronunciation skills. This can include seeking guidance from English teachers for correct pronunciation and listening to English conversations, songs, and movies to practice pronunciation through imitation.

For English teachers, it is essential to ensure students comprehend the materials they are learning, particularly in terms of English pronunciation. Teachers should provide accurate information on English pronunciation and offer ample opportunities for students to practice speaking and reading English. Providing positive and constructive feedback will help students

understand and improve their pronunciation effectively.

References

- Afshari, S., & Ketabi, S. (2016). Current trends and future directions in teaching English pronunciation. *International Journal of Research Studies in Language Learning*, 5. <https://doi.org/10.5861/ijrsl.2016.1437>
- Derwing, T. M., & Rossiter, M. J. (2002). ESL learners' perceptions of their pronunciation needs and strategies. *System*, 30(2), 155–166. [https://doi.org/https://doi.org/10.1016/S0346-251X\(02\)00012-X](https://doi.org/https://doi.org/10.1016/S0346-251X(02)00012-X)
- Grabe, W. (2007). English, information access, and technology transfer: A rationale for English as an international language. *World Englishes*, 7, 63–72. <https://doi.org/10.1111/j.1467-971X.1988.tb00215.x>
- Indrayadi, T., Daflizar, D., Irawan, Y., & Helty, H. (2021). Indonesian EFL Students' Difficulties in Recognizing English Letters. *The Qualitative Report*. <https://doi.org/10.46743/2160-3715/2021.4846>
- Irawan, Y., Ayunda, 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, 645. <https://doi.org/10.33394/jk.v9i2.7743>
- Kosasih, M. M. (2021). Factors Affecting Indonesian Students in Learning English Pronunciation. *International Research in Higher Education*, 6(3), 13. <https://doi.org/10.5430/irhe.v6n3p13>
- Levis, J., Sonsaat, S., Link, S., & Barriuso, T. (2016). Native and Nonnative Teachers of L2 Pronunciation: Effects on Learner Performance. *TESOL Quarterly*, 50. <https://doi.org/10.1002/tesq.272>
- Li, F. (2016). Contrastive Study between Pronunciation Chinese L1 and English L2 from the Perspective of Interference Based

- on Observations in Genuine Teaching Contexts. *English Language Teaching*, 9, 90. <https://doi.org/10.5539/elt.v9n10p90>
- Liang, D. (2015). Chinese Learners' Pronunciation Problems and Listening Difficulties in English Connected Speech. *Asian Social Science*, 11. <https://doi.org/10.5539/ass.v11n16p98>
- Mahmood, A., & Jamal, L. (2017). ESP Need Analysis: A Study of English Language Learning of Business Students Keyword-English for Specific Purpose (ESP); Language for Specific Purposes (LSP). In *Journal of English Language and Literature* (Vol. 8, Number 2).
- Moedjito. (2016). The Teaching of English Pronunciation: Perceptions of Indonesian School Teachers and University Students. *English Language Teaching*, 9, 30–41. <https://api.semanticscholar.org/CorpusID:54912352>
- Moedjito, Jaelani, S. R., & Asrobi, M. (2019). What makes EFL speakers' utterances more intelligible in the context of global intelligibility? *Indonesian Journal of Applied Linguistics*, 9(1), 157–166. <https://doi.org/10.17509/ijal.v9i1.15235>
- Munro, M., & Derwing, T. (2006). The functional load principle in ESL pronunciation instruction: An exploratory study. *System*, 34, 520–531. <https://doi.org/10.1016/j.system.2006.09.004>
- Munro, M. J., & Derwing, T. M. (1995). Foreign Accent, Comprehensibility, and Intelligibility in the Speech of Second Language Learners. *Language Learning*, 45(1), 73–97. <https://doi.org/https://doi.org/10.1111/j.1467-1770.1995.tb00963.x>
- Nkhi, S., & Lebona, T. (2023). Challenges Encountered by ESL Students in The Development of Communicative Competence Skills in Lesotho. *International Journal of Language and Literary Studies*, 5. <https://doi.org/10.36892/ijlls.v5i2.1229>
- Noviyenty, L., & Putri, M. (2021). Mother Tongue Interference Towards Students' English Pronunciation: A Case Study in

Beyond Linguistika

ISSN: 1550564779 (online)

IAIN Curup. *Proceedings of the International Conference on Educational Sciences and Teacher Profession (ICETeP 2020)*, 283–290.
<https://doi.org/10.2991/assehr.k.210227.049>

Nurjamin, L. (2020). The Priorities of English Pronunciation Elements for Indonesian Junior High School Students. *English Education and Applied Linguistics Journal (EEAL Journal)*, 3, 16–21.
<https://doi.org/10.31980/eealjournal.v3i1.850>

Pallier, C., Colomé, A., & Sebastián-Gallés, N. (2001). The Influence of Native-Language Phonology on Lexical Access: Exemplar-Based Versus Abstract Lexical Entries. *Psychological Science*, 12(6), 445–449.
<https://doi.org/10.1111/1467-9280.00383>

Pangua, S., Wello, B., Jabu, B., & Macdonald, D. (2017). Self-Assessed Professional Competence of the High School EFL Teachers in Toraja Indonesia. *International Journal of English Linguistics*, 8, 25.
<https://doi.org/10.5539/ijel.v8n2p25>

Ishaq, R. K. M. (2018). English Education Reform in Arab World. *US-China Foreign Language*, 16(3).
<https://doi.org/10.17265/1539-8080/2018.03.003>

Rodriguez, G., Cawili, A., & Puyoc, E. (2020). Variation of Pronouncing Cultural Words of Biga, Tongrayan, and Limos Groups in Kalinga, Philippines. *International Journal of English Literature and Social Sciences*, 5, 2575–2584.
<https://doi.org/10.22161/ijels.56.97>

Sahiruddin, S., Junining, E., & Prawoto, S. (2020). The Implementation of English as A Medium of Instruction in An Indonesian EFL Setting. *Proceedings of the Brawijaya International Conference on Multidisciplinary Sciences and Technology (BICMST 2020)*, 205–208.
<https://doi.org/10.2991/assehr.k.201021.048>

Sakhiyya, Z. (2019). English as a Lingua Franca: Perspectives for English language teaching and for teacher education. *Proceedings of*

Bayu Andika Prasatyo

the UNNES International Conference on English Language Teaching, Literature, and Translation (ELTLT 2018), 117–119.
<https://doi.org/10.2991/eltlt-18.2019.24>

Scarcella, R. C., & Oxford, R. L. (1994). Second language pronunciation: State of the art in instruction. *System*, 22(2), 221–230.
[https://doi.org/https://doi.org/10.1016/0346-251X\(94\)90058-2](https://doi.org/https://doi.org/10.1016/0346-251X(94)90058-2)

Soomro, A. (2018). Pedagogical Practices Employed in Teaching and Learning Speaking Skills at Taif University. *International Journal of English Linguistics*, 8, 273.
<https://doi.org/10.5539/ijel.v8n4p273>

Zein, S., Sukyadi, D., Hamied, F., & Lengkanawati, N. (2020). English language education in Indonesia: A review of research (2011–2019). *Language Teaching*, 53, 1–33.
<https://doi.org/10.1017/S0261444820000208>

Zhou, Q., Li, Y., & Guo, L. (2020). Guidance of Computer-aided Self-teaching and Practice of English Pronunciation for Chinese Adult English Learners. *Journal of Physics: Conference Series*, 1453, 012077.
<https://doi.org/10.1088/1742-6596/1453/1/012077>

