

## CHAPTER TWO LITERATURE REVIEW

### 2.1 Previous Study

This study used six (6) previous studies that are relevant to phonetics and phonology and English Consonants Clusters (CC). These studies are to know the English phonetic system. These studies investigated students who study English as a foreign language.

**Table 2.1 Previous Studies**

No	Study	Objective	Findings
1	Ambelegin & Hulu (2019)	To investigate the mispronunciation of EFL learners in a University by adapting the standard of Received Pronunciation (RP) and the factors of English vowels and consonants mispronunciation.	The consonant sounds /ð/, /θ/, /t h /, /z/, /r/, /ʃ/, /ʒ/, /dʒ/, /nj/, and consonant closed syllable sound of /k/ were pronounced incorrectly. The vowel sounds /ə/ and /æ/, and the diphthong sounds /eɪ/ was pronounced incorrectly. The factors influencing the English vowels and consonants mispronunciation of the EFL learners were mother tongue interference (native language), sound systems of Indonesian and English differences (phonetic ability), educational background, and environmental background (amount of exposure).
2	Almuslimi (2020)	To investigate pronunciation errors in EFL learners	The results of the questionnaire reveal that the most students make mistakes in producing certain sounds both consonants and vowels. Also, they have problems with word ending letters like the past tense inflection —edl or plural —sl. Final word and initial clusters are also an area

			of common errors.
3	Hasan (2019)	To investigate Patterns of English Consonant Clusters	First, Initial and final CCs are always related to single syllables. Further, most medial CCs are related to different neighboring syllables in the same word. Second, /s/ has the widest distribution in initial CCs. Then, no English word begins with more than three consonants and no English word ends with more than four consonants.
4	Situmeang & lubis (2020)	To investigate Students' Difficulties in Pronouncing Fricative Consonant	The students' difficulties in pronouncing fricative consonant are producing sound (/θ/, /ð/, /ʃ/, /f/, /v/, /ʒ/, /z/, /s/ and /h/). The reasons for these difficulties are: different elements between native language and the target language and the same phonetic feature in both language but differ in their distributions.
5	Laia (2020)	To investigate students' errors in pronouncing voiced and voiceless English consonants	Kinds of students' errors in pronouncing consonants were based on the Place of Articulations and ased on the rules in pronouncing consonants.
6	Khanbeiki & Rokni (2015)	To find out whether initial or final consonant clusters are more difficult for Persian students to pronounce correctly.  To investigate whether other factors such as the phonological system of the students' mother tongue have any effect on the learning of the rule	Initial consonant clusters must be much more difficult for Persian learners to learn than their final counterparts as the degree of difference between English and Persian is greater in such clusters. In fact, based on the CA hypothesis, they will need much more practice and exposure to such clusters to be able to learn the true articulation of English words containing initial consonant clusters.

Ambalegin & Hulu (2019) investigated the mispronunciation of Putera Batam University EFL learners by adapting the standard of Received Pronunciation (RP) and the factors of English vowels and consonants mispronunciation. This descriptive qualitative research applied observational method with participatory technique in collecting data, and articulatory identity method in analyzing the data. The English mispronunciation was found in the EFL learners' English pronunciation. The factors influencing the English vowels and consonants mispronunciation of the EFL learners were mother tongue interference (native language), sound systems of Indonesian and English differences (phonetic ability), educational background, and environmental background (amount of exposure).

Study concluded that EFL learners mispronounce certain phonemes that are in a mismatch with word orthography and consonant clusters. Moreover, students mispronounced vowels. Almuslimi (2020) has the strongest factors that contribute to this problem, according to this study, were due to learners' mother tongue interference, and other causative factors such as limited language exposure. The study recommends that teaching should focus more on pronunciation along with preparing suitable material. The results of the questionnaire reveal that the most students make mistakes in producing certain sounds both consonants and vowels. Also, they have problems with word ending letters like the past tense inflection —ed or plural —s. Final word and initial clusters are also an area of common errors.

Situmeang & Lubis (2020) identified the students' difficulties in pronouncing fricative consonants and the factors that impede their pronouncing those consonants. A descriptive qualitative method was employed where nine students at the fourth semester of TBI-2 in Tarbiyah and Teacher Training Faculty IAIN Padangsidimpuan were involved in this study. The data present that the students' difficulties in pronouncing English fricative consonant sounds are; the different elements between native language and the target language (/q/,/ð/,/ð/), the same phonetic feature in both language but differ in their distributions (/v/,/f/,/ʒ/,/z/,/s/and/h/). The study found that the dominant difficulty in producing English Fricative sounds are sound /ð/- voiced dental fricative in initial word position and /q/- voiceless dental fricative in initial word position. Nine out of 9 students mispronounce sound /ð/ and 9 out of 9 students mispronounce sound /q/. All of the students pronounce the sound /ð/ and /q/ inappropriately. Whereas, the factor of its difficulties are the effect of mother tongue or first language, unsuccessful in using borrowed English words, lack of knowledge about English fricative sounds, prefers to speak Batakness rather than English and less of pronunciation practice.

Laia (2020) identified the pronunciation errors made by the second semester of English Language Education Study Program in a University. The result of data analysis showed that; (1) There are some of the errors that students made in pronouncing voiced and voiceless English consonants based on the manner of articulations, such as: error in pronouncing /ʒ/, /ð/, /θ/ and /ʃ/. Students also made errors based on the rules in pronouncing consonants, it was errors in pronouncing silent consonants, double consonants, consonants digraph/other combinations,

indeed in pronouncing simple consonants students still made the errors. (2) The factors that caused the students error in pronouncing English consonants were students' first language, amount of exposure, phonetic ability, motivations, combinations of English sounds, concept of English sound, curriculum of Indonesian, and the last students' facilities in learning English.

Khanbeiki & Rokni (2015) find out whether initial or final consonant clusters are more difficult for Persian students to pronounce correctly to investigate whether other factors such as the phonological system of the students' mother tongue have any effect on the learning of the rule. The other secondary aim was to investigate whether other factors such as the phonological system of the students' mother tongue have any effect on the learning of the rule. The findings of the research are highly consistent with the CA hypothesis, based on which the degree of difference between learners' native language and the target language can bring about greater difficulty. According to this hypothesis, the more different the two languages are, the more difficult it will be for learners to learn the target language. Therefore, initial consonant clusters must be much more difficult for Persian learners to learn than their final counterparts as the degree of difference between English and Persian is greater in such clusters. In fact, based on the CA hypothesis, they will need much more practice and exposure to such clusters to be able to learn the true articulation of English words containing initial consonant clusters.

From the previous studies above, it can be conclude that all the studies discuss the problem of pronunciation in non-native speakers, especially in English learners. Most of them have difficulties in pronouncing phonemes in English since their

mother tongues are different and some are even different from English as lack as understanding how to pronounce phonemes in English. There are similarities with this study discusses how English learners pronounce phonemes, especially consonant clusters and their problem in pronouncing them. Meanwhile, there are differences in which this study focuses on how they pronounce and their consistency in pronunciation clusters with two or three even more consonants. In the other side, the previous studies explained the pronunciation errors made by English learners.

## **2.2 Phonetics and Phonology**

Although phonetics and phonology both concern the study of speech, linguists have traditionally considered these as different areas of study. Phonetics subsumes the physical aspects of speech production and their relation to speech perception, while phonology addresses the functional and systemic nature of the sounds of particular languages (Levis & Munro, 2012). According to Hamka (2016: 357) “Phonetics is physical manifestation of language in sound waves, how sounds are articulated and how sounds are perceived. Phonetics perceives Language as independent that study of all sounds”. Further, it is stated that phonetics can be defined as the actual production and perception of speech sounds by humans, whereas phonology is about the systems of sounds in use in a particular language or context. Therefore, phonetics is the study of speech sounds; how they are produced in the vocal tract or production of speech sounds.

According to Hamka (2016), phonology is the study of the systems of sounds and sound combinations in a language. It is concerned with how these sounds are systematically organized in a language; how they are combined to form words,

how they are categorized by, and interpreted in the minds of speakers. Phonology is the branch of linguistics which investigates the ways in which sounds are used systematically in different languages to form words and utterances. Phonology is the study of the patterns of sounds in a language and across languages. Put more formally, phonology is the study of the categorical organization of speech sounds in languages; how speech sounds are organized in the mind and used to convey meaning. In addition, phonology is often said to be concerned with the organization of speech within specific languages, or with the systems and patterns of sounds that occur in particular languages. So, phonology is the study of the sound system of language; how the particular sounds used in each language form and integrated system for encoding information and how such systems differ from one language to another. Based on the statement above, it can be said that phonetics is about how sound is produced and perceived. Phonology is the systematic study of the sounds used in language, their internal structure, and their composition into syllables, words and phrases (Widya Sari, 2022).

Human speech manifests itself in spectacular diversity, ranging from ubiquitous sounds such as “m” and “a” to the rare click consonants in some languages of southern Africa. This range is generally thought to have been fixed by biological constraints since at least the emergence of *Homo sapiens*. At the same time, the abundance of each sound in the languages of the world is commonly taken to depend on how easy the sound is to produce, perceive, and learn. This dependency is also regarded as fixed at the species level (Blasi et al, 2019).

The International Phonetic Association was formed in 1886, and this organization also formed the International Phonetic Alphabet or what is known as IPA. IPA is

the study of sound symbols around the world, so by using IPA we can learn how to pronounce sounds in languages around the world. International Phonetic Alphabet of English has 24 consonant sounds. Some consonants have voice from the voice box and some don't. These consonants are voiced and voiceless pairs /p/ /b/, /t/ /d/, /k/ /g/, /j/, /l/, /m/, /n/, /f/, /s/, /v/, /w/, /g/, /f/ /v/, /s/ /z/, /θ/ /ð/, /ʃ/ /ʒ/, /tʃ/ /dʒ/. and to support data collection in this study, according to (Hamka 2016 p,358) international Phonetic Alphabet like many books have studied is as the reference of this discussion to decide the phonemes (symbols of sounds). It may be found in British English and American English. British and American English also refer to this IPA. However, there will be different accents in comprehending and producing the symbols and the sounds in practice, but not go away from IPA.

		PLACE							
MANNER		Bilabial	Labio-dental	Lingua-dental	Alveolar	Post-alveolar	Palatal	Velar	Glottal
Approximates	Stop	<b>p, b</b>			<b>t, d</b>			<b>k, g</b>	
	Fricative		<b>f, v</b>	<b>θ, ð</b>	<b>s, z</b>	<b>ʃ, ʒ</b>			<b>h</b>
	Affricate					<b>tʃ, dʒ</b>			
	Nasal	<b>m</b>			<b>n</b>			<b>ŋ</b>	
	Liquid (Lateral)				<b>l</b>				
	Liquid (Rhotic)				<b>r</b>				
	Glide	<b>w</b>					<b>j</b>	<b>w</b>	

\***Bolded** symbol is the voiced sound

Table 2. English Consonant IPA Chart



### 2.3 English Consonants Cluster

Children learning to produce consonant clusters in any language have a challenging task, and those learning English have a uniquely complex situation. The large variety of clusters permissible in English, both at the beginning and at the end of syllables, makes even monosyllables extraordinarily complex (in words such as strength). McLeod, Doorn & Reed (2001) stated that consonant clusters are a feature of many of the world's languages. According to Mc Culy (2009), "consonant is a phoneme whose articulation involves some audible obstruction in the oral cavity". So consonant is a phoneme whose articulation involves some sound obstruction in the oral cavity. A consonant cluster is mentioned to mean a run of consonants uninterrupted by a vowel or a pause. In this case, "CCs (Consonant Clusters) in English are classified into initial, medial and final according to their positions within words. Initial CCs, (Consonant Cluster) known as onsets, comprise two or three consonants, and they are referred to as two (Hasan, 2019).

Initial consonant cluster according to Hasan (2019) refer to a sequence of two or three consonants that occur at the beginning of English words in the same syllable. In a single syllable, onset and coda are optional whereas the nucleus represented by a vowel is mandatory in which case no syllable is formed without a vowel except the syllabic consonants that constitute syllables without vowels. And final CC or consonant cluster is the consonant place in the final syllable in which the word consists of two three or four consonants.

A consonant cluster, also known as a consonant blend, is where two or more consonant sounds occur in a word without an intervening vowel, but slightly

different from the consonant cluster. If the consonant cluster focuses on pronunciation, the consonant blend focuses on letters. English has several consonant cluster: two consonant clusters three consonant clusters and four consonant clusters in the initial, medial and final.

<b>Types of Cluster</b>	<b>Example in initial position</b>	<b>Example in medial position</b>	<b>Example in final position</b>
<b>Two Cluster</b>	<i>special</i> , [speʃ.əl], <i>cluster</i> [klʌs.tər], <i>scope</i> [skəʊp].	<i>football</i> , (fʊt.bɔ:l) <i>printing</i> , (prɪn.tɪŋ) <i>picnic</i> (pɪk.nɪk)	<i>earth</i> , (ɜ:θ), <i>jump</i> , (dʒʌmp)
<b>Three Cluster</b>	<i>splash</i> , (splæʃ). <i>Straw</i> (strɔ:)	<i>Translate</i> (trænz 'leit)	<i>next</i> , (nekst), <i>Context</i> (kɒn.tekst)
<b>Four Cluster</b>	<i>Exclaim</i> (ɪk 'skleɪm)  <i>exclude</i> (ɪk 'sklu:d),	<i>Construct</i> , (kən 'strʌkt),  <i>Tempress</i> (temp.trɪs)	<i>twelfths</i> (twelfθs)  <i>sixths</i> (sɪksθs)

## 2.4 English Pronunciation in EFL

In a language study context, students learn various elements in learning, and one of the most important elements in language learning is learning about pronunciation. Each student is required to understand how to pronounce a language they are learning; they are required to pronounce sentence by sentence correctly. "Proper English pronunciation is a fundamental component of effective

communication, and thus it is perceived to be a cornerstone of intelligibility among speakers. However, second language (L2) learners of English are more likely to encounter obstacles, when it comes to communicating freely with English native speakers. In fact, "difficulty is somewhat anticipated, especially when the two languages being compared come from different backgrounds" Al-Yami (2021). "Pronunciation is one aspect of the language teaching process that is tackled by every L2 learner in his journey to acquire native-like proficiency in the target language one of which is pronunciation (Khanbeiki & Abdolmanafi-Rokni, 2015). Mastering the pronunciation of a language is highly important in terms of communication since in many cases the replacement of one sound for another will result in changes in meaning, hence affecting the flow of communication. Therefore, one of the aims of the teachers must be training the students to pronounce sounds as native speakers of the target language.

Learning English is a challenging process for everybody. This is due to differences in their mother tongue and also their second language. According to Fadillah (2020). There are many differences here, both in terms of structure, spelling and sound. As a lingua franca, English has become a prominent language to learn outside English-spoken countries. Especially in Indonesia, English slowly takes over the social life of Indonesian citizens and now serves several significant purposes, including within educational setting. Yet, within educational setting the burden to learn English become a challenging part for EFL learners in Indonesia, as they face several difficulties regarding the pronunciation of English words. And "Learning English as a foreign language (EFL) is quite challenging for particular learners. Their mother tongue somehow can be such an obstacle in

comprehending the language they learn. The interference of their mother tongue more or less influence EFL Learners' language acquisition (Septianasari, 2019). According to Silalahi (2016), mispronunciation can be simply defined as the act of pronouncing linguistic expression in the ways that are regarded wrong, incorrect, or unconventional. It has become the concern in EFL (English as a Foreign Language) because mispronunciations can lead to miscommunication, misunderstanding, and misperception among participants of communication. Therefore, in Indonesian pedagogical context, improving EFL learners' awareness about their mispronunciation is absolutely important. There are problem that makes student faced the difficulties in pronouncing English as their second language according to Fadillah (2020) , because of its official status as a foreign language, and the fact that English is only spoken by a small-scale population, Indonesian people are having difficulties learning English if not from scratch, and throughout its history in Indonesian education, English has been taught without first learning about its phonological and phonetic system. English teachers rarely teach their students English vowels and consonants, and drill them with pronouncing words without knowing the sound construction of that specific word, making it difficult for Indonesians EFL learners to differentiate sounds as it keeps on changing depending on who pronounces it. Thus, research and experiments on EFL learners' pronunciation are being actively executed everywhere in Indonesia to figure out which vowels and consonants that EFL learners find pretty challenging to pronounce". What EFL learners need to remember is that there is no such thing as 'perfect' pronunciation as long as they are aware of 'intelligible pronunciation, then they succeed in making other people understand what is being

spoken in a natural setting (Gilakjani, 2016). In addition, (Gilakjani 2012, p.8 in Malfees 2020) claims that teaching pronunciation should be more than just training individual sounds or isolated words. Pronunciation needs to be viewed as an essential part of communication.

Therefore, in order to consolidate pronunciation skills (both comprehension and production), it is crucial to incorporate pronunciation activities into classroom through various materials and tests. Good pronunciation skills make speakers more confident to and improve their listening comprehension. Most teachers in Indonesia teach basic grammar in teaching students at school and rarely do teachers teach basic pronunciation, this is what makes it difficult for students to pronounce a word.