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Navigating the Soundscape: Challenges and Strategies for Enhancing Phonetic Skills for English Learners: A Study at Cihan University

Graduation Project Document Submitted to Department of English in Partial Fulfillment for the Requirements for the Degree of Bachelor of English language and literature

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Abstract

This study investigates the phonetic challenges faced by Kurdish and Arabic EFL learners at Cihan University in Erbil, Kurdistan. Employing a mixed-methods design, the research combines quantitative analyses—using oral tests and questionnaires—with qualitative insights derived from lecturer interviews to examine mispronunciation patterns and their underlying causes. The findings reveal that learners struggle notably with vowel length, consonant cluster epenthesis, and suprasegmental features (stress and intonation), largely attributable to first-language interference and late exposure to English. Quantitative data indicate that nearly all participants encountered difficulties in these areas, while qualitative feedback underscores the importance of explicit phonetic instruction and the integration of technology-enhanced tools. Furthermore, the study introduces a psychophonetic approach, which fuses insights from psycholinguistics and phonology, to reframe traditional pronunciation training. This innovative framework emphasizes perceptual training, articulatory practice, and cognitive load reduction to help learners rewire their phonological processing and improve speech production. The implications for EFL pedagogy are significant: enhancing phonetic awareness and refining instructional strategies can boost communicative competence and learner confidence. By offering a comprehensive analysis of both the linguistic and cognitive dimensions of pronunciation challenges, this research contributes evidence for curriculum design and teacher training initiatives, paving the way for future studies in pronunciation pedagogy within diverse EFL contexts.

Keywords: EFL learners ; phonetics ; phonology ; challenges ; strategies ; pronunciation ; L1 interference ; sounds

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CHAPTER ONE
Introduction

This chapter consists of the background of the Research, the statement of the problem, the significance of the study, the scope of the study, the target population, the key focus area, and the research questions.

This thesis aims to clarify the challenges and strategies for enhancing phonetic skills for English learners specifically for EFL learners at Cihan university-Erbil.

1.1 Background of the research

Pronunciation is a crucial aspect of non-native English proficiency, directly influencing intelligibility and effective communication. While accents naturally vary among both native and non-native speakers, achieving clarity remains a common goal. Many learners strive for a standardized model, such as the BBC accent, to enhance their comprehensibility in global contexts.

For these reasons, English pronunciation has always been a strong challenge for (EFL)/ (ESL) students as it is one important part of their major field. However, it is quite tricky for Arabic/Kurdish people due to the dominant influence of the mother tongue and some other difficulties. According to Wong (1987), cited by Murcia, Brinton, and Goodwin (1996), pronunciation is not exclusively a linguistic matter, Factors such as Exposure to the target language, Amount and type of prior pronunciation, instruction Attitude towards the language, and the role of the learner's first language needs to be taken into consideration.

The study of pronunciation seems easy to be taught by repeating the word sounds. However, some students still ignore the function because actually, the repeat of sounds needs correction (Lepore, 2014). Besides, the purpose of pronunciation class is not concerned with making the students native-like speakers of English but it is associated with good communication (Ferdiyanto, 2019).

According to the statement above, as we know Allah SWT created humans with different kinds and abilities in their language, so they need to learn how to pronounce something clearly and speak with good utterance as the prophet Muhammad did. As in the Hadith narrated by Imam Abu Dawud: .(The messenger of Allah spoke in a district manner so that anyone who listened to him could understand it. Just as the Prophet

Moses was known as Kalimullah (the one who spoke with God), and the infant Jesus spoke intelligibly from his cradle to defend his mother. Language serves as a powerful tool for communication. Its clarity and intelligibility are essential for conveying meaning effectively, reinforcing the necessity of precise pronunciation and articulation in speech. Therefore, the accuracy of pronunciation will be a good tool in communication especially to deliver our message and idea.

1.2 Statement of the problem

Pronunciation is also termed as the method of producing certain sounds within a language. English department students sometimes make mistakes in pronouncing many vowel and consonant sounds. The difficulties between the sound system and the writing system are caused by some differences in letters and sounds. This often leads listeners to misunderstand the received speech. One common challenge faced by all EFL learners is the dual function of English letters: one representing the letter's name or visual form, and the other representing its phoneme—the actual sound it produces.

Recognizing the length of the vowel whether short or long is another common issue for EFL students in terms of transcription which lead also to altering the meaning of the word such as the words/lIv/ and /li:v/.

Another issue faced by EFL students during their learning process might be the dissimilarity between the spelling and the pronunciation of the words . One of the problems is when the students want to pronounce English words like "park" [pa:k] and "thin" [θIn], they tend to say [*bark] and [*sIn]. According to Yuniarti, about pronunciation problem is a “genuine pronunciation problem that exists when the learners have difficulties in making the required sounds to imitate”. The intelligibility of pronunciation for the English department students in speaking activity is vital, to prove their dexterity in the language acquisition process. They are expected to demonstrate a higher level of mastery than students in other fields.

Conquering consonant clusters for Arabic/Kurdish Speakers of English is an issue faced by the English department students; Consonant clusters, or blends, occur when two or more consonants appear consecutively within a word, as in strike, tasks. Kurdish and Arabic EFL learners often struggle with these clusters, frequently inserting an epenthetic vowel to ease pronunciation. For instance, they may pronounce street as *sitreet or strength as *sitrength

Clusters with three consecutive consonants are common in English but pose a significant challenge for Arabic speakers, as Arabic phonology does not permit clusters exceeding two consonants. Examples of such challenging words include spring, strength, splash, and spilled. Or the final cluster as in twelfth, *twelfith .

On the other side Navigating vowel distinctions: “i” and “e” for Arabic EFL is more challenging than for Kurdish EFL While English has 20 vowels and diphthongs, Arabic typically has only 6 vowels (Modern Standard Arabic: /i/, /a/, /u/, plus long versions) Because of this, native Arabic speakers may often use a more limited range of vowels when first learning English phonology. The Kurdish (Sorani)language has 9 vowels (short & long).

The most common confusion is between /ɪ/ and /e/, which can completely transform a word: consider the difference between till and tell, or bit and bet. On the other side Kurdish has a richer vowel system than Arabic, making it a better comparison to English.

□ Table 1: Key Differences in Vowel Systems of English, Kurdish, and Arabic

Phonological Feature	English	Kurdish (Central Kurdish – Sorani)	Arabic (Modern Standard Arabic)
Short vs. Long Vowel Distinction	Phonemic; changes word meaning (e.g., *bit* /bɪt/ vs. *beat* /biːt/)	Phonemic; vowel length alters meaning (e.g., *pit* /pɪt/ vs. *pît* /piːt/)	Phonemic and morphological (e.g., *kataba* /kataba/ “he wrote” vs. *kātaba* /kaːtaba/ “he corresponded”)
Front vs. Back Vowel Contrast	Strong (e.g., *bit* /ɪ/ vs. *but* /ʌ/)	Strong (e.g., *î* /iː/ vs. *û* /uː/)	Limited; front vowels less prominent
Schwa /ə/	Very common (e.g., *sofa*, *about*)	Not present in phonemic inventory	Not present as a phoneme
Diphthongs	Frequent and contrastive (e.g., *time* /taɪm/, *boy* /bɔɪ/)	Rare; mostly monophthongs	Rare; diphthongs are minimal and often simplified
Rounded Vowels	Common (e.g., *go*, *saw*)	Present but fewer (e.g., *çû* /ʧuː/ “he went”)	

Table 1 outlines key vowel system features in English, Kurdish (Sorani), and Arabic (Modern Standard Arabic), highlighting differences that are particularly relevant for English as a Foreign Language (EFL) learners. Understanding these distinctions is essential in addressing pronunciation challenges and phonological interference across languages.

- **Vowel Length**:

  Both English and Kurdish use vowel length contrastively to distinguish word meanings—such as *bit* /bɪt/ vs. *beat* /biːt/ in English, and *pit* /pɪt/ vs. *pît* /piːt/ in Kurdish. In Arabic, vowel length is also phonemic, but it is closely tied to the language's morphological system. For example, *kataba* /kataba/ ("he wrote") and *kātaba* /kaːtaba/ ("he corresponded") differ not only in vowel length but in verb pattern. The long vowel ā in *kātaba* reflects a different morphological form (Form III) and is not simply a matter of vowel lengthening, as it would be in English or Kurdish.

- **Vowel Quality (Front vs. Back Vowels)**:

  English and Kurdish show a strong contrast between **front and back vowels**, which plays an important role in distinguishing meaning (e.g., *bit* vs. *but* in English; *î* vs. *û* in Kurdish). In contrast, Arabic has a **more limited set of front vowels**, making such contrasts less prominent.

- **Schwa /ə/**:

  The schwa sound is very common in unstressed syllables in English (e.g., *sofa*, *about*), but it does not exist as a phoneme in Kurdish or Arabic. This absence often causes difficulties for EFL learners when trying to produce natural English stress and rhythm patterns.

- **Diphthongs**:

  English frequently uses diphthongs—two vowel sounds blended within the same syllable (e.g., *time* /taɪm/, *boy* /bɔɪ/). These are rare in both Kurdish and Arabic, which tend to favor monophthongs (single, pure vowel sounds). As a result, learners from Kurdish and Arabic backgrounds may simplify or mispronounce English diphthongs.

- **Rounded Vowels**:

  English includes a wide range of rounded vowels (e.g., *go*, *saw*), which are produced with rounded lips. Kurdish includes some rounded vowels as well, though fewer in number (e.g., *çû* /ʧuː/, meaning "he went"). In Arabic, however, rounded vowels are very limited, and learners often replace them with unrounded alternatives, such as /a/, leading to pronunciation difficulties in English.

The same in **Mastering English diphthongs problem for Arabic/Kurdish EFL students** Some elongated diphthongs, sometimes called double vowels, can be tough for Kurdish/Arabic speakers to become accustomed to as only two exist in Arabic dialects while the English language features eight! In particular, /eɪ/ and /əʊ/ are often pronounced in too short a manner and tend to be mistaken for /e/ and /ɒ/. While common pronunciation mistakes by Kurdish EFL Learners replace English diphthongs with monophthongs, but Kurdish (especially Kurmanji) is a better comparison to English than Arabic when it comes to diphthongs.

Remember that diphthongs are two vowel sounds spoken in the same syllable.

Another problem could be Inserting too many glottal stops in English for speakers of Arabic. Arabic speakers often insert excessive glottal stops (/ʔ/) in English pronunciation because the glottal stop is a key feature of Arabic phonology but is much less common in English. Before initial * ʔapple */ʔæp.ļ/ instead of apple /ˈæp.ļ/, between two consecutive vowels (Hiatus) *I ʔam */aɪ ʔæm/ instead of I am /aɪ æm/and inside words where no Glottal Stop exists in English coʔoperate /koʔˈɑ.pəɾ.eɪt/ instead of paper /ˈpeɪ.pəɾ/ . Unlike Arabic, Kurdish phonology does not heavily rely on the glottal stop (/ʔ/) in the same way. However, Sorani Kurdish (especially as spoken in Iraq and Iran) does use the glottal stop phonemically, which can sometimes cause pronunciation issues when speaking English.

A further problem might be **The distinguishing between/ P/ and /B/ in English for Arabic EFL** While English contains both the bilabial consonant /b/ and its voiceless counterpart /p/, Arabic dialects don't present a distinction between these sounds. As a result, native Arabic speakers may replace the /p/ in English words with its closest alternative /b/, pronouncing words like "examPle" as "*examBle" and "pet" as "bet". While we want to activate our vocal folds for the /b/ sound, the English /p/ sound is unvoiced and requires more aspiration (a puff of air) when released. The Kurdish language system has both sounds. unlike Kurdish, Arabic lacks **Distinction between /V/ and /F/ in English,** where replacing /v/ with /f/, pronouncing words like vacation or level as facation or *lefel. This is because the voiced /v/ consonant sound doesn't exist in Arabic dialects: as a result, the sound closest in similarity, /f/ is substituted in valley, flavor, favorite, vast, and five.

The **CH** and **SH** sounds in English can pose significant challenges for **Arabic/Kurdish EFL learners** for several reasons, related to the **phonetic structure** of their native languages mainly relating to substitution and intelligibility issues.

Articulating NG for Arabic /Kurdish Speakers is a tricky one that needs a good knowledge of English pronunciation because although /ŋ/ exists in both GB English and Kurdish/Arabic dialects, the different restrictions placed on it by each language can be challenging for new speakers to become accustomed to. In Arabic/Kurdish, /ŋ/ is only pronounced before /k/, while in English it can occur on its own in middle or final positions before many different consonants (without /g/ in Modern Received Pronunciation).

This is an important sound to become comfortable with as it occurs very often in English, denoting verb tense. While /n/ is produced with the tongue tip behind the teeth on the alveolar ridge, /ŋ/ is produce at the back of the mouth, with the back of the tongue making contact with the soft palate. swinging, rung, tongue, along, running, bringing.

Pronouncing/ R/ For Arabic/Kurdish speakers

The British RP /r/ is pronounced in a vowel-like way with tension in the tongue. This is often challenging in lots of Sanskrit and Latine. real, red, reason, ranch, reply

Avoiding staccato speech for Arabic speakers comes when Kurdish/Arabic are often articulated in a very energetic way and this energetic nature often gets transferred into English when a British-sounding accent places emphasis where it is needed and reduces vowels that are typically weak.

STACCATO: is an abnormal speech in which there are pauses between words, sometimes associated with some sclerosis or roughness, the words are separate and punchier, a person with staccato speech often leaves out articles and prepositions which can make it difficult for them to be understood. (oxford reference).

Limited pronunciation skills can decrease learners' self-confidence, restrict social interactions, and negatively affect estimations of a speaker's credibility and abilities.

1.3 Significance of the Study

The precise articulation of English sounds is a real obstacle to both EFL learners and lecturers (Abugohar and Yunus, 2018, p. 94). According to Yates and Zielinski (2009), "pronunciation is the way of producing the sounds that are used to make meaning when speakers speak. Therefore, the purpose of this study is to identify and analyze the difficulties experienced by Arabic/Kurdish EFL students in pronunciation find the strategies that navigate those challenges, and overcome these struggles the results will provide insights and assist teachers of English as a Foreign Language as they strive to reduce or eliminate future problems regarding pronunciation.

1.4 Scope of Study

This research focuses on understanding the auditory challenges faced by English learners and exploring strategies to enhance their phonetic skills.

1.5 Target population:

- EFL learners from the English Department/Cihan university-Erbil
- The study may include students from different cultural backgrounds, with varying levels of proficiency.

Key Focus Areas:

- Phonetic Challenges: Difficulties in perceiving, producing, and distinguishing English sounds, including vowels, consonants, stress patterns, and intonation.
- Soundscapes and Exposure: The impact of natural and artificial auditory environments (e.g., classroom instruction, multimedia resources, and real-world interactions) on phonetic acquisition.
- Cross-linguistic Influence: The role of native language phonetics and phonology in shaping learners' challenges and strategies.

1.6 Research Questions

This study seeks to answer the following questions:

1. What are the most common pronunciation challenges faced by Arabic and Kurdish EFL learners, and how do their native phonological systems contribute to these difficulties?
2. How do Arabic and Kurdish EFL learners struggle with English vowel and consonant distinctions, particularly in diphthongs, consonant clusters, and problematic sounds?
3. What strategies can effectively help Arabic and Kurdish EFL learners improve their pronunciation and achieve better intelligibility in English?

CHAPTER TWO

Literature Review

Pronunciation is a critical component of language acquisition, serving as a foundation for effective communication in English. For English as a Foreign Language (EFL) learners, developing phonetic skills—encompassing accurate sound articulation, stress, rhythm, and intonation—presents unique challenges. These difficulties often stem from the interference of learners' native languages, inadequate exposure to English sound systems, and limited instructional resources. As Yates and Zielinski (2009) argue, effective pronunciation is not merely about achieving native-like fluency but ensuring intelligibility and fostering communicative confidence.

Research in this area highlights the interplay between phonetics and pronunciation training, emphasizing the need for structured approaches to overcome learners' phonetic challenges. The use of phonetics, particularly the International Phonetic Alphabet (IPA) and targeted auditory discrimination exercises, has proven effective in equipping learners to recognize and produce unfamiliar sounds. Studies such as Fraser (2000) and Gilakjani (2016) underscore the importance of contextualized and innovative strategies in enhancing pronunciation skills, yet gaps remain in addressing the diversity of learners' needs and optimizing instructional methods across different settings.

This literature review explores the challenges faced by English learners in acquiring phonetic skills and examines strategies to address these barriers. It delves into the role of phonetics in pronunciation training, the impact of environmental and technological factors on learning outcomes, and the integration of innovative teaching methodologies. By analyzing these aspects, the review aims to provide a comprehensive understanding of current practices and their potential to improve the phonetic competence of EFL learners.

2.1 Enhancing Pronunciation Skills Through the Phonetic Method

The research by Nurmahyuni Asrul and Azizah Husda explores the effectiveness of the phonetic method in improving pronunciation skills among EFL learners at the senior high school level. Conducted through Classroom Action Research (CAR), this study demonstrates the transformative potential of phonetic instruction in addressing common pronunciation challenges faced by non-native English speakers.

The Role of Pronunciation in EFL Learning

Pronunciation plays a critical role in effective communication, often acting as a barrier for EFL learners due to insufficient exposure to accurate sounds and intonation. As stated by Yates and Zielinski (2009), clear pronunciation supports intelligibility and fosters confidence in communication. This study builds on the premise that pronunciation improvement should not aim for native-like accuracy but rather focus on clarity and communicative competence.

Phonetic Method as a Teaching Approach

The phonetic method, which emphasizes the study of phonemes, articulation, and the use of the International Phonetic Alphabet (IPA), has been identified as an effective tool for improving learners' pronunciation. Previous studies, such as Suhardi (2018), highlight how phonetic instruction helps students understand sound patterns, differentiate phonemes, and apply stress and intonation correctly. The research aligns with these findings, demonstrating that introducing students to speech organs and phonetic transcription can significantly enhance pronunciation skills.

Implementation of the Phonetic Method

The study employed a two-cycle action research framework, systematically integrating the phonetic method into the classroom. Activities included:

- Teaching IPA symbols.
- Practicing articulation through transcription.
- Encouraging students to use dictionaries and analyze speech organs for sound production. These activities resonate with Fraser's (2000) recommendations that phonetic training be embedded in contextualized and interactive classroom practices.

The study revealed notable improvements in students' pronunciation, with all participants achieving the minimum required scores by the second cycle. Similar to findings by Bambang and Ahsan (2020), the use of phonetic transcription enhanced students' ability to distinguish segmental and suprasegmental features, such as word stress and intonation. Additionally, students demonstrated increased confidence and reduced anxiety, aligning with Lepore's (2014) assertion that pronunciation training alleviates learner frustration and boosts classroom participation. The study highlights the need for ongoing teacher support and innovative teaching media, such as recordings and visual aids, to sustain learner engagement.

Challenges in Phonetic Instruction

The research underscores limitations in time allocation and curriculum flexibility, which are common issues in EFL settings (Samawiyah & Saifuddin, 2016). The findings emphasize that phonetic training requires sustained effort, appropriate teaching resources, and adaptability to meet diverse learner needs.

Asrul and Husda's research contributes valuable insights into the pedagogical application of the phonetic method. It supports the integration of phonetic instruction into EFL curricula to enhance pronunciation skills, foster learner confidence, and improve overall communication effectiveness. Future studies could explore scalable approaches and incorporate advanced technological tools to further optimize pronunciation training in diverse learning contexts.

2.2 Pronunciation Difficulties in the Consonant System for Arabic Speakers Learning English After Puberty

Research conducted by Ana Marina do Val Barros West Virginia University demonstrated that the acquisition of English pronunciation poses significant challenges for Arabic speakers, particularly within the consonant system, due to fundamental phonological differences between the two languages. These challenges are amplified when learning occurs after puberty, a period linked to diminished neuroplasticity, making it harder to achieve native-like pronunciation (Lenneberg, 1967).

Phonological Differences Between Arabic and English

The phonemic disparities between Arabic and English are central to the pronunciation difficulties Arabic speakers encounter. Key areas of challenge include:

1- Voicing Distinctions: The English bilabial plosive /p/ is absent in Arabic, often leading to substitutions with /b/ (e.g., "pat" pronounced as "bat"). This substitution reflects the learners' reliance on their native phonological system (Al-Tamimi & Khamaiseh, 2014).

2- Interdental Fricatives: English interdental fricatives /θ/ (as in "thin") and /ð/ (as in "this") are typically replaced by /s/ or /z/, respectively, due to the lack of these sounds in Arabic phonology (Flege, 1995).

3- Consonant Clusters: Arabic avoids complex consonant clusters, frequently inserting vowels (epenthesis) to simplify English clusters (e.g., "school" rendered as "es-kool") (Selinker, 1972).

4- Aspiration: English aspirated stops (/pʰ/, /tʰ/, /kʰ/) are often pronounced without aspiration by Arabic speakers, which can impede intelligibility (Zughoul, 1979).

These discrepancies highlight the profound influence of the learners' native phonology on their English pronunciation.

Impact of the Critical Period on Pronunciation

According to the Critical Period Hypothesis (Lenneberg, 1967), language learning post-puberty is less conducive to achieving native-like phonological acquisition. For Arabic speakers, this delayed start magnifies the difficulty of adapting articulatory habits to produce unfamiliar English consonants. Reduced neural flexibility post-puberty also contributes to the entrenchment of native-language phonetic patterns, making error correction more challenging.

Role of Transfer and Fossilization

Language transfer, where features of the first language influence second-language production, significantly affects Arabic speakers learning English. Selinker (1972) noted that fossilization—the persistence of incorrect linguistic features—occurs when repeated errors solidify over time, particularly in learners with limited corrective feedback. For instance, the inability to distinguish /p/ from /b/ may persist despite exposure to accurate pronunciation models.

Strategies to Address Consonant Pronunciation Challenges

Effective strategies for mitigating pronunciation difficulties emphasize targeted and explicit phonetic instruction. These include:

- Phonetic Awareness Training: Introducing learners to the International Phonetic Alphabet (IPA) to systematically learn and practice English consonant sounds (Swan & Smith, 2001).
- Auditory Discrimination Exercises: Training learners to distinguish minimal pairs (e.g., "pat" vs. "bat") to enhance perception and production accuracy.
- Articulatory Practice: Explicitly teaching the articulation of challenging sounds, such as interdental fricatives, using visual aids, speech organ diagrams, and pronunciation software.

The pronunciation difficulties Arabic speakers face when learning English consonants post-puberty are deeply rooted in phonological differences, critical period constraints, and the interplay of language transfer and fossilization. Addressing these challenges requires targeted phonetic instruction, focused on the specific consonant sounds that

learners struggle with. By incorporating structured training and innovative strategies, educators can significantly improve learners' intelligibility and communicative competence.

2.3 Teaching and Learning Phonetics Obstacles in EFL Classrooms

A study by Abdulwahid (2023) indicated that phonetics, as a crucial component of language acquisition, facilitates learners' ability to produce and comprehend sounds in a second language. Despite its importance, teaching and learning phonetics in EFL classrooms face numerous obstacles, particularly in contexts like Cihan University-Erbil in the Kurdistan Region of Iraq. These challenges stem from both learner-specific factors and broader systemic issues related to instructional methods, resources, and institutional priorities.

The Importance of Phonetics in EFL Learning

Phonetics is foundational to mastering pronunciation, stress, rhythm, and intonation—key elements of communicative competence (Yates & Zielinski, 2009). Proficiency in phonetics allows EFL learners to reduce communication breakdowns and achieve intelligibility in real-world interactions. However, its inclusion in EFL curricula is often undervalued, overshadowed by a greater emphasis on grammar and vocabulary (Gilakjani, 2016). This imbalance contributes to learners' struggles with segmental (individual sounds) and suprasegmental (stress and intonation) aspects of English.

Challenges in Teaching Phonetics:

1- **Limited Teacher Expertise:**

- Many EFL teachers lack specialized training in phonetics, resulting in insufficient or inaccurate instruction. Studies indicate that teachers often feel unprepared to teach the International Phonetic Alphabet (IPA) or articulate complex phonetic concepts (Fraser, 2000).
- Teachers may rely on traditional, less effective methods, such as rote repetition, instead of using innovative, interactive approaches.

2- **Inadequate Resources:**

- The lack of access to modern teaching tools, such as pronunciation software, phonetic charts, and audio-visual aids, hinders effective instruction (Gilbert, 2008).
- EFL institutions in regions like Erbil often prioritize general English skills over specialized training in phonetics, leaving classrooms under-resourced for this critical area.

3- Curriculum Limitations:

- Phonetics is frequently sidelined in EFL curricula, treated as a peripheral component rather than a core subject (Hismanoglu, 2012).
- Rigid curriculum structures may not allow teachers the flexibility to dedicate adequate time to phonetic training, particularly for addressing learners' unique pronunciation challenges.

4- **Student Attitudes and Motivation:**

- Learners often perceive phonetics as overly technical or irrelevant, leading to low engagement (Swan & Smith, 2001).
- Pronunciation anxiety further discourages active participation, especially when learners struggle with unfamiliar sounds or fear making mistakes (Haidara, 2016).

Learning Obstacles for EFL Students

1- Phonological Interference:

- Native language interference significantly impacts learners' ability to produce English sounds. For Kurdish-speaking students, the absence of certain English phonemes in their native phonology presents persistent difficulties.

2- Late Introduction to Phonetics:

- Many learners encounter phonetics for the first time at the university level, making it harder to adapt established articulatory habits (Lenneberg, 1967).

3- Lack of Practice Opportunities:

- Limited exposure to authentic spoken English in classroom and social contexts restricts learners' ability to internalize and apply phonetic concepts effectively (Gilakjani, 2012).

Strategies to Address Phonetics Obstacles

1- Teacher Training and Development:

- Providing specialized training for EFL teachers to enhance their understanding of phonetics and equip them with innovative teaching strategies.

2- Incorporation of Technology:

- Using pronunciation software, mobile apps, and phonetic transcription tools to make learning more engaging and accessible (e.g., Elsa Speak, Sounds: The Pronunciation App).

3- Curriculum Redesign:

- Integrating phonetics as a core component of the EFL curriculum, emphasizing both segmental and suprasegmental features.

4- Interactive and Communicative Methods:

- Encouraging activities such as minimal pair drills, role-playing, and shadowing native speakers to enhance learners' phonetic competence in practical contexts.

Teaching and learning phonetics in EFL classrooms face significant obstacles, including limited teacher expertise, insufficient resources, and learner-specific challenges. These barriers, particularly evident at Cihan University-Erbil, highlight the need for institutional support, teacher training, and innovative strategies to prioritize phonetics in EFL instruction. Addressing these challenges will not only improve pronunciation outcomes but also enhance overall communicative competence for learners in Kurdistan and beyond.

2.4 Difficulties Faced by Students in Pronouncing English Consonant Sounds

Research conducted by Fachrizal Lefiandi NIM in the Faculty of Ed Pronunciation, as a fundamental aspect of language learning, is crucial for effective communication in English. However, for non-native speakers, producing consonant sounds accurately poses significant challenges. This issue is particularly pronounced for EFL learners, as their native phonology often influences their ability to articulate English consonants correctly. Fachrizal Lefiandi's study sheds light on these difficulties, which are shaped by linguistic, psychological, and instructional factors.

Phonological Differences and Native Language Interference

The primary source of difficulty in pronouncing English consonant sounds stems from the differences between learners' native phonetic systems and that of English. Native language interference, as outlined by Flege (1995), occurs when learners substitute or mispronounce unfamiliar consonants due to the absence of equivalent sounds in their mother tongue. Common issues include:

- Absence of Phonemes: Sounds like /p/, /v/, /θ/, and /ð/ are often replaced with familiar alternatives (e.g., /p/ becomes /b/).
- Cluster Simplification: Learners insert vowels to break up consonant clusters (e.g., "stop" becomes "es-top").
- Aspiration: English aspirated stops (/p^h/, /t^h/, /k^h/) are produced without aspiration, which can affect intelligibility.

Learner-Specific Challenges

1- Age and Critical Period Hypothesis:

- Learners who begin studying English after the critical period for language acquisition (Lenneberg, 1967) often struggle with phonetic adaptation, resulting in fossilized pronunciation errors.

2- Limited Exposure to English Sounds:

- Restricted interaction with native or proficient speakers limits learners' auditory discrimination and speech production capabilities (Gilakjani, 2012).

3- Psychological Barriers:

- Pronunciation anxiety and fear of making mistakes discourage active practice, further hindering progress (Haidara, 2016).

Instructional Obstacles

- Insufficient Phonetic Training:

  Many EFL curricula prioritize grammar and vocabulary over phonetics, leaving learners with inadequate guidance for mastering consonants.
- Limited Teacher Expertise:

  Teachers often lack specialized training in phonetics, resulting in a reliance on traditional methods like repetition, which are less effective for addressing pronunciation challenges (Fraser, 2000).

Strategies for Overcoming Consonant Pronunciation Difficulties

1- Phonetic Awareness Training:

- Introducing learners to the International Phonetic Alphabet (IPA) can help them identify and practice problematic sounds systematically.

2- Auditory Discrimination Exercises:

- Minimal pair drills (e.g., "pat" vs. "bat") improve learners' ability to perceive and produce distinct sounds.

3- Interactive Learning Methods:

- Activities such as shadowing native speakers, role-playing, and using pronunciation apps (e.g., Elsa Speak) make practice more engaging and effective.

4- Teacher Support and Feedback:

- Providing immediate and constructive feedback helps learners refine their pronunciation in real time.

The difficulties faced by students in pronouncing English consonant sounds highlight the interplay of linguistic, psychological, and instructional factors. Addressing these challenges requires a multifaceted approach, combining targeted phonetic instruction, enhanced exposure to authentic English, and innovative teaching strategies. Lefiandi's research underscores the need to prioritize pronunciation in EFL curricula to foster better communicative competence among learners.

2.5 The Pronunciation Problems among Kurdish Learners of English

Zanyar Nathir Ghafar's study, The Pronunciation Problems among Kurdish Learners of English, explores the multifaceted difficulties Kurdish EFL learners face when mastering English pronunciation. The research highlights the influence of phonological differences, learning contexts, and instructional practices on learners' struggles, particularly in acquiring consonant sounds and achieving intelligibility.

Phonological Disparities Between Kurdish and English

Ghafar identifies significant challenges rooted in the structural differences between the Kurdish and English phonological systems. These include:

- **Voiced and Voiceless Distinctions:** Kurdish learners often confuse sounds like /v/ and /w/ or /p/ and /b/ due to their divergent representations in Kurdish.

- **Interdental Fricatives:** The absence of /θ/ (as in think) and /ð/ (as in this) in Kurdish leads to substitutions with /s/ and /z/.
- **Consonant Clusters:** Learners simplify complex clusters by inserting vowels (e.g., stop pronounced as es-top), reflecting Kurdish phonotactic rules.

These findings align with Flege's (1995) Speech Learning Model, which highlights the influence of native phonology on second language acquisition.

Critical Period and Fossilization

Ghafar's research underscores that learners acquiring English after the critical period (Lenneberg, 1967) often experience fossilization of pronunciation errors. This phenomenon arises from entrenched native language habits and limited corrective feedback in their learning environments.

Sociolinguistic and Psychological Factors

1- Limited Exposure:

- Ghafar notes that Kurdish learners' exposure to authentic English is minimal, impeding their ability to internalize phonetic distinctions effectively.

2- Pronunciation Anxiety:

- Fear of making errors and being judged discourages active participation in pronunciation practice, compounding the problem.

Instructional Challenges

1- Curriculum Limitations:

- Ghafar critiques the lack of emphasis on pronunciation in EFL curricula, which often prioritize grammar and vocabulary.

2- Teacher Preparation:

- Many teachers in Kurdish classrooms lack formal training in phonetics, making it difficult to address pronunciation issues systematically.

Strategies Proposed by Ghafar

Ghafar recommends several strategies to address these challenges, including:

1- **Phonetic Training:**

- Teaching the International Phonetic Alphabet (IPA) to familiarize learners with English sounds.

2- **Auditory and Articulatory Exercises:**

- Using minimal pairs, articulatory drills, and shadowing native speakers to improve accuracy.

3- **Interactive Tools:**

- Incorporating technology, such as pronunciation apps and speech software, to enhance learner engagement.

4- **Confidence-Building Activities:**

- Role-playing and group exercises to reduce anxiety and foster active participation.

This study provides valuable insights into the pronunciation problems faced by Kurdish EFL learners, emphasizing the role of phonological interference, instructional gaps, and learner attitudes. The research highlights the need for targeted phonetic training and innovative instructional practices to improve learners' pronunciation and communicative competence.

2.6 Issues of Pronunciation and The Attitudes of Kurdish University Students and Teachers Towards English Language Pronunciation in English Language Departments

Mokhles Saleh Ibrahim's research addresses a critical issue in English language education in Kurdish-speaking regions, focusing on the challenges associated with English pronunciation and the attitudes of both Kurdish university students and teachers toward it. The study provides a nuanced examination of the factors affecting pronunciation acquisition in the context of the English Language Department at Kurdish universities.

Pronunciation has long been identified as a significant challenge for learners of English as a foreign language (EFL). Research by Jenkins (2000) and Derwing and Munro (2005) has shown that phonological differences between a learner's native language and English can create substantial obstacles in acquiring accurate pronunciation. In particular, Ibrahim's (2024) study highlights the difficulties faced by Kurdish-speaking students,

whose native language does not contain certain English phonemes, such as /θ/ or /ʃ/, which are often problematic for learners.

The attitudes of students and teachers toward pronunciation are central to Ibrahim's inquiry. Previous studies have indicated that while students often recognize the importance of clear pronunciation for effective communication, they may prioritize other language skills, such as grammar or vocabulary (Derwing & Munro, 2005). Ibrahim's research reflects similar findings among Kurdish students, revealing that many students perceive pronunciation as less important compared to other areas of language acquisition. This perception is compounded by the broader emphasis in many EFL curricula, including those in Kurdish universities, on grammar and reading comprehension rather than on phonological accuracy.

In contrast, Ibrahim's research also notes that teachers generally recognize the importance of pronunciation for communicative competence, with some adopting a more rigorous approach to addressing pronunciation issues in the classroom. However, the study suggests that the teaching methods employed in Kurdish universities often lack sufficient focus on pronunciation training, with limited use of specialized techniques for improving phonetic accuracy. As a result, students continue to face challenges in achieving native-like pronunciation.

In conclusion, Ibrahim's (2024) study provides critical insights into the intersection of pronunciation difficulties and attitudinal factors in the Kurdish context. The research underscores the need for a more balanced pedagogical approach that integrates explicit pronunciation instruction into the language learning process, recognizing its crucial role in effective communication. The findings suggest that both students and teachers would benefit from a more comprehensive understanding of pronunciation's role within the broader framework of English language proficiency.

2.7 The Perception of Using Minimal Pairs Approach on the Pronunciation Proficiency of Phonemes by Arab Learners of English

Ezz &Iten's research, conducted at Northcentral University, explores the effectiveness of the minimal pairs approach in improving the pronunciation proficiency of phonemes among Arab learners of English. The study investigates the perceptions of both students and instructors regarding the application of this phonological training method to address common pronunciation challenges faced by Arab speakers of English.

The minimal pairs approach has been widely studied in second language acquisition (SLA) as a technique for improving learners' phonological awareness. According to Liao (2009), minimal pairs—words that differ in only one sound, such as "bit" and "beat"—serve as an effective tool for helping learners discriminate between similar phonemes. This approach is particularly beneficial for learners whose native languages lack certain phonemic distinctions present in English, a characteristic shared by many Arab learners of English. As noted by Al-Moamary (2005), Arab learners often struggle with English sounds such as /p/ vs. /b/, /æ/ vs. /e/, and /θ/ vs. /s/, which do not exist in many Arabic dialects.

Ezz Iten's study (2024) examines how the use of minimal pairs can facilitate the accurate production of these problematic sounds by raising learners' awareness of subtle phonemic differences. The research indicates that the use of minimal pairs in pronunciation instruction encourages Arab learners to focus on sound distinctions that are crucial for intelligibility. As a result, it enhances their ability to both perceive and produce English sounds more accurately.

Several studies have corroborated the effectiveness of minimal pairs in pronunciation instruction. For instance, Baker and Goldstein (2009) found that minimal pair practice helped learners improve not only their pronunciation accuracy but also their listening skills, as it requires learners to discriminate between near-identical sounds. Additionally, studies by Derwing and Munro (2005) have shown that phonological instruction, including minimal pair practice, significantly contributes to learners' communicative competence, particularly in reducing the potential for misunderstandings due to pronunciation errors.

In terms of learner perceptions, Iten's study highlights that while many Arab learners recognize the value of minimal pairs in improving their pronunciation proficiency, some report initial difficulties in adapting to the approach due to its focus on subtle sound distinctions. Despite this, the study reveals that after sustained practice, learners generally view the minimal pairs method as a valuable tool for mastering English phonemes and achieving greater accuracy in pronunciation.

In conclusion, Ezz Iten's research provides compelling evidence that the minimal pairs approach can be a highly effective strategy for improving pronunciation proficiency among Arab learners of English. By addressing specific phonological challenges unique to this learner group, the approach enhances both the perceptual and productive aspects of pronunciation. Iten's findings contribute to the growing body of literature advocating

for the integration of phonological awareness activities, such as minimal pair exercises, into English language teaching practices.

2.8 Investigating the Perception and Production of the Arabic Pharyngealized Sounds by L2 learners of Arabic

Ali M. Alghamdi's research, titled "Investigating the Perception and Production of the Arabic Pharyngealized Sounds by L2 Learners of Arabic", explores the challenges faced by second language (L2) learners in perceiving and producing pharyngealized sounds in Arabic. Pharyngealization, a key phonological feature of Arabic, refers to the articulation of certain consonants with a constriction of the vocal tract, resulting in a distinct sound that is difficult for non-native speakers to produce accurately.

Pharyngealized sounds in Arabic, such as /sˤ/, /dˤ/, and /tˤ/, present a particular challenge for L2 learners, as these sounds do not exist in many other languages, including languages commonly spoken by Arabic learners, such as English. According to Flege (1995), learners of a second language often struggle to perceive and produce sounds that are not present in their native language. This challenge is exacerbated by the fact that pharyngealization in Arabic is not merely a difference in place or manner of articulation but involves a complex interaction of articulatory settings that are unfamiliar to many L2 learners.

Alghamdi's study (2024) builds on this body of work by investigating how L2 learners perceive and produce these pharyngealized sounds. The research highlights that learners often struggle with both the perceptual and productive aspects of pharyngealized consonants, with many failing to distinguish them from their non-pharyngealized counterparts in terms of auditory perception. As noted by Escudero and Boersma (2004), L2 learners typically transfer their native language phonetic patterns when learning new sounds, which in the case of Arabic pharyngealized sounds can lead to misarticulations and confusion.

The study also explores the role of acoustic and articulatory factors in the perception and production of these sounds. Alghamdi's research indicates that the use of phonetic training, particularly training focused on auditory discrimination and articulatory awareness, can help learners improve both their perception and production of pharyngealized sounds. This finding is consistent with previous studies, such as those by Kuhl (2000), which suggest that explicit phonetic training can enhance learners'

perceptual abilities and facilitate the production of unfamiliar sounds.

In terms of learner attitudes, Alghamdi's research underscores that while many L2 learners acknowledge the importance of mastering pharyngealized sounds for accurate Arabic pronunciation, they often report difficulty due to the unique articulatory demands these sounds place on the vocal apparatus. The study also finds that learners' success in mastering these sounds is influenced by factors such as their linguistic background, the level of exposure to Arabic, and the teaching methods employed.

In conclusion, Alghamdi's (2024) research contributes valuable insights into the challenges faced by L2 learners in acquiring the perception and production of Arabic pharyngealized sounds. It emphasizes the need for targeted phonetic training that focuses on both auditory discrimination and articulatory practice. By investigating the cognitive and articulatory processes involved in learning these challenging sounds, Alghamdi's study adds to the broader understanding of second language phonology and offers practical implications for teaching Arabic as a second language.

2.9 Challenges and Strategies in Teaching English Pronunciation to Non-Native Speakers

Zeena Al-Asi's research, "Challenges and Strategies in Teaching English Pronunciation to Non-Native Speakers," investigates the complex issues educators face when teaching English pronunciation to learners from diverse linguistic backgrounds. The study also explores effective strategies for addressing these challenges and enhancing learners' pronunciation proficiency.

Pronunciation is widely recognized as a critical component of communicative competence in second language acquisition (SLA). However, non-native English speakers often face significant difficulties in acquiring accurate pronunciation, primarily due to the influence of their native language phonology. As noted by Jenkins (2000), non-native speakers frequently struggle with unfamiliar sounds, stress patterns, and intonation, which can impede both intelligibility and confidence in communication. Al-Asi's research builds on this foundation by identifying specific pronunciation challenges that arise in different linguistic and cultural contexts.

One major challenge highlighted in Al-Asi's study is the interference of a learner's first language (L1) with the phonological system of English. This interference can result in persistent errors in producing certain English sounds that do not exist in the learner's L1,

such as /θ/ and /ð/ for speakers of Arabic or /r/ and /l/ for speakers of Japanese. According to Derwing and Munro (2005), such pronunciation errors can affect intelligibility and lead to misunderstandings in real-world communication. Al-Asi emphasizes that these errors are often compounded by limited access to pronunciation-focused instruction in many EFL curricula.

In addressing these challenges, Al-Asi identifies several effective strategies for teaching pronunciation to non-native speakers. These include the use of phonetic training, minimal pair exercises, and communicative activities that integrate pronunciation practice into real-life contexts. Additionally, Al-Asi advocates for the incorporation of technology, such as language learning apps and pronunciation software, which provide learners with immediate feedback and individualized practice opportunities. This aligns with findings by Levis (2007), who highlighted the role of technology in enhancing pronunciation instruction through innovative tools like speech recognition software.

Moreover, Al-Asi's study underscores the importance of fostering a supportive learning environment that encourages learners to practice pronunciation without fear of judgment. The research suggests that emphasizing intelligibility over native-like accuracy can reduce learner anxiety and promote better outcomes. This approach resonates with the work of Morley (1991), who argued that the primary goal of pronunciation instruction should be to ensure effective communication rather than achieving native-like speech.

In conclusion, Zeena Al-Asi's research provides a comprehensive overview of the challenges faced by non-native speakers in learning English pronunciation and offers practical, evidence-based strategies for overcoming these obstacles. By emphasizing the role of targeted instruction, technology, and learner-centered approaches, the study contributes to the growing body of literature aimed at improving pronunciation pedagogy in second language education.

2.10 The Interlanguage Phonology of Kurdish EFL Learners: A Case Study of Vowel Epenthesis, Consonant Deletion, and Metathesis

Lureen Naser's research, "The Interlanguage Phonology of Kurdish EFL Learners: A Case Study of Vowel Epenthesis, Consonant Deletion, and Metathesis," examines the phonological processes Kurdish learners of English adopt during second language (L2) acquisition. This study provides valuable insights into how learners' native language (L1) influences their production of English and highlights systematic deviations in their

pronunciation caused by interlanguage phenomena.

Interlanguage phonology refers to the transitional linguistic system learners develop as they acquire a second language. It reflects the influence of their L1 while attempting to approximate L2 norms (Selinker, 1972). Naser's study focuses on three key phonological phenomena frequently observed in Kurdish EFL learners:

1- Vowel Epenthesis: Kurdish learners often insert vowels to break consonant clusters, particularly in word-initial and word-final positions. This tendency arises from the phonotactic constraints of Kurdish, which favors open syllables over consonant clusters. Similar findings have been reported in Broselow (1983), who notes that learners insert vowels as a strategy to adapt English words to the syllable structures of their native language.

2- Consonant Deletion: Learners omit challenging consonants, particularly in syllable codas or in consonant clusters unfamiliar to their L1. Naser's findings align with Tarone's (1980) work, which demonstrates that consonant deletion is a common simplification strategy among L2 learners, reflecting their difficulty in reproducing L2 phonological structures that deviate from their native patterns.

3- Metathesis: The reordering of sounds within a word is another strategy observed in Kurdish learners, often employed unconsciously to make words conform to familiar phonological patterns. Although less commonly discussed in L2 acquisition research, this phenomenon reflects learners' creative adaptations to phonological challenges, as highlighted in Naser's case study.

Naser's research situates these processes within the broader framework of second language acquisition (SLA) and highlights the impact of L1 interference. The study emphasizes that these phonological deviations are systematic rather than random, resulting from learners' attempts to reconcile the structural differences between Kurdish and English. According to Flege (1995), such interlanguage adaptations are common when learners encounter sounds and phonotactic patterns absent in their native language.

The study also underscores the pedagogical implications of these findings. Naser advocates for targeted pronunciation instruction that directly addresses the challenges of vowel epenthesis, consonant deletion, and metathesis. Strategies such as explicit teaching of English phonotactics, phonetic drills, and communicative pronunciation activities are recommended to help learners overcome these systematic errors. This aligns with Morley's (1991) emphasis on integrating pronunciation training into EFL curricula to enhance communicative competence.

In conclusion, Lureen Naser's research contributes significantly to the understanding of interlanguage phonology in Kurdish EFL learners. By analyzing vowel epenthesis, consonant deletion, and metathesis, the study offers a comprehensive view of the phonological adaptations made by learners and highlights practical strategies for addressing these challenges in EFL teaching.

2.11 A Study of Factors Affecting EFL Learners' English Pronunciation Learning and the Strategies for Instruction

A study conducted **by Gilakjani about** Factors Affecting EFL Learners' English Pronunciation Learning and the Strategies for Instruction," offers a detailed examination of the key factors influencing English pronunciation acquisition among EFL learners. The study further provides evidence-based strategies to improve pronunciation instruction, addressing a critical area in English language teaching often neglected in traditional pedagogical frameworks. Gilakjani employs a qualitative research approach, synthesizing insights from previous studies and theoretical perspectives to analyze the linguistic, psychological, and instructional factors affecting EFL learners' pronunciation proficiency. The research focuses on learners at various proficiency levels and considers diverse sociocultural and educational contexts, providing a comprehensive overview of the challenges learners face and the strategies teachers can adopt.

Key Factors Affecting Pronunciation

1- Linguistic Influences:

The study highlights that interference from learners' native language (L1) significantly affects their ability to perceive and produce certain English sounds. Learners struggle particularly with phonemes and stress patterns absent in their L1. For example, Arabic learners may find it difficult to distinguish between /p/ and /b/, while Japanese learners may struggle with /r/ and /l/ distinctions (Flege, 1995).

2- Psychological and Social Factors:

Motivation, self-confidence, and attitudes toward learning play critical roles. Highly motivated learners with a positive attitude are more likely to persevere in mastering pronunciation, whereas anxiety and fear of errors can hinder progress (Krashen, 1982).

3- Instructional Factors:

The study critiques traditional approaches to EFL instruction that prioritize grammar and vocabulary over pronunciation, resulting in insufficient practice and feedback. Gilakjani underscores the need for explicit pronunciation instruction and phonological awareness activities integrated into language teaching.

Findings and Implications

The findings emphasize that improving pronunciation requires a multifaceted approach:

- **Explicit Phonetic Instruction:** Teaching learners about the articulation of sounds and phonological patterns improves their awareness of English phonemes and intonation.
- **Technology Integration:** Utilizing pronunciation-focused software and language learning applications enhances learner autonomy and provides immediate feedback (Levis, 2007).
- **Communicative Activities:** Embedding pronunciation practice into meaningful communicative contexts ensures learners can apply phonological skills in real-life situations (Morley, 1991).
- **Teacher Training:** Equipping educators with the tools and knowledge to teach pronunciation effectively is essential for addressing learner needs.

The study's findings have significant implications for curriculum design in EFL contexts. Incorporating pronunciation as a core component of language instruction can improve learners' intelligibility, confidence, and overall communicative competence.

While the study provides valuable insights, it relies heavily on qualitative synthesis and does not include empirical data from fieldwork or learner assessments. This limitation suggests the need for future studies involving experimental or longitudinal methodologies to validate the proposed strategies' effectiveness across diverse learner populations.

Abbas Pourhosein Gilakjani's research contributes significantly to the field of English language teaching by identifying critical factors affecting EFL learners' pronunciation learning and proposing practical instructional strategies. By emphasizing the integration of pronunciation into communicative and technology-driven teaching approaches, the study addresses gaps in traditional pedagogical practices and provides a roadmap for enhancing pronunciation instruction. However, future empirical studies are needed to

build on these findings and further refine pronunciation teaching methodologies.

The literature review highlights significant contributions to understanding the factors affecting EFL learners' pronunciation and strategies for addressing these challenges. However, despite these valuable insights, notable gaps remain, particularly in empirical validation and tailored approaches that address the unique needs of specific learner groups, such as those from underrepresented linguistic backgrounds.

In our research, we aim to build on this foundation by adopting a more empirical and context-specific approach. We focus on bridging the scientific gap by designing comprehensive studies that combine qualitative and quantitative methods to evaluate the effectiveness of innovative pronunciation strategies. Our work will prioritize learner-centered methodologies, integrating technology and phonological awareness activities while considering sociocultural factors that shape pronunciation acquisition.

Through rigorous investigation and thoughtful application of findings, we are committed to contributing to the field of pronunciation pedagogy by providing practical, evidence-based solutions that enhance the learning experience for diverse EFL populations. Our goal is to offer robust insights that not only address existing gaps but also set new directions for research and instructional practices in this critical area.

CHAPTER THREE

Research Design

This study follows a qualitative descriptive design aimed at investigating the phonetic challenges faced by Kurdish and Arabic EFL learners. It combines interviews, questionnaires, and oral tasks to explore learners' difficulties with specific English phonemes, focusing on vowel length, consonant clusters, and suprasegmental features such as stress and intonation.

3.1 Research Methodology

This study employs a qualitative descriptive methodology, supported by mixed-methods elements. It integrates subjective learner responses, expert perspectives, and observed oral performance to explore the phonetic challenges faced by Kurdish and Arabic EFL learners. The chosen methodology allows for a comprehensive, context-sensitive analysis of real-time pronunciation problems within the learners' academic environment.

The study focuses on describing existing patterns of mispronunciation through triangulation of tools, including student questionnaires, lecturer interviews, and targeted oral pronunciation tasks. This approach is well-suited for capturing both perceptual and performance-based data regarding EFL learners' phonetic abilities.

3.2 Participants

A random sample of 45 male and female Arabic/Kurdish EFL learners was selected to ensure a representative cross-section of this population. The participants were English department majors, including both students and lecturers, to provide insights into a context where English is the primary focus. The students were predominantly from the third and fourth stages of their studies. These stages were chosen due to students' advanced awareness of language use after completing seven academic semesters. By this point, they had studied the functions and stylistics of English in depth, including two significant phonetics and phonology courses during the second stage and a more focused revision in the third stage through their linguistic coursework.

Fifteen students were selected from each English language sector, including the Arts and Letters, Translation, and Educational departments. However, the study recognized a limitation in the number of lecturers and students available, which may impact the

breadth of the findings. A larger sample of participants would have enhanced the critical analysis and provided more comprehensive phonotactic-linguistic insights, as well as greater applicability of the results across learners.

The detailed analysis that follows provides a clear picture of the pronunciation challenges faced by students at different proficiency levels, from beginner to advanced, across the third and fourth stages of the English departments. This offers valuable insights for educators and curriculum developers in similar EFL contexts. Table 1 presents an in-depth breakdown of participants' proficiency levels in pronunciation, segmented by native language (Arabic/Kurdish), gender, stage of study (freshman/sophomore/junior/senior), and the specific pronunciation challenges they face. These challenges range from segmental features (e.g., vowel length, consonants /p/, /θ/, /ð/, /ʒ/, /v/) to suprasegmental features (e.g., consonant clusters, stress, and intonation). The table quantifies the percentages of mispronunciations, primarily categorized by native language and proficiency level.

3.3 Instruments

To investigate the pronunciation challenges faced by Arab and Kurdish EFL learners at Cihan University–Erbil, three primary instruments were employed: a student questionnaire, a lecturer interview, and a set of structured oral interview tasks.

The first instrument was a questionnaire distributed to students, designed to collect data on their perceived pronunciation difficulties. The questions focused on specific problematic sounds—particularly consonants and vowels—mother tongue interference, their motivation to improve pronunciation, and whether the phonetics course had positively influenced their communication confidence. This instrument provided a broad understanding of learners' self-reported challenges and attitudes toward pronunciation.

The second instrument consisted of semi-structured interviews with English language lecturers, particularly those specializing in linguistics. These interviews explored instructors' observations of their students' most frequent phonetic difficulties, the likely causes behind these issues (e.g., L1 influence, curriculum limitations, lack of practice), and recommendations based on their classroom experiences. Interviewing specialists from multiple English departments enriched the data with expert insight.

The third instrument was a series of oral interview tasks conducted with selected students. Unlike a formal oral test, this stage involved the researcher guiding students

through specific pronunciation tasks. These included:

- Pronouncing selected words and phrases targeting difficult vowel and consonant sounds
- Reciting tongue twisters to assess fluency and articulation
- Reading interrogative sentences aloud to evaluate rhythm and intonation recognition

This oral component was essential for diagnosing real-time pronunciation issues, particularly in suprasegmental features like stress, intonation, and rhythm, which are not easily captured through questionnaires alone. These tasks allowed the researcher to observe jaw movement, sound articulation, and the degree of phonetic awareness in spontaneous or semi-controlled speech.

The triangulation of subjective data (questionnaires), expert perspectives (lecturer interviews), and direct performance evidence (oral interview tasks) ensured a comprehensive and context-sensitive analysis of EFL pronunciation challenges. This multi-method approach aligns with the phonetic nature of the study, which requires observable and analyzable oral production to identify patterns of mispronunciation and their sources.

3.4 Data collection

Data collection was conducted during the second semester of the 2024–2025 academic year. It involved two main tools: a student questionnaire and a set of oral interview tasks designed to assess the pronunciation skills of 45 randomly selected EFL learners from three English departments—Arts and Literature, Education, and Translation.

In addition, semi-structured interviews were conducted with lecturers specializing in linguistics to obtain reliable, expert insights into the pronunciation challenges faced by students. These lecturers provided valuable observations and reflections based on their academic and classroom experience, contributing to a deeper understanding of the phonetic issues under investigation.

3.5 Data Analysis

Before beginning the analysis phase, all oral responses were carefully recorded to ensure clarity and audibility, enabling accurate identification of pronunciation difficulties. This preparatory step was essential to ensure the validity and reliability of the analysis, particularly in identifying mispronunciations across different word positions and sound

categories.

The analysis incorporated both quantitative and qualitative approaches to offer a comprehensive understanding of learners' pronunciation challenges:

- Quantitative analysis involved calculating the percentages of pronunciation errors related to specific segmental and suprasegmental features (such as vowel length, consonant clusters, and intonation). Descriptive statistics—including frequencies and percentages—were used to summarize the data, identify common trends, and compare learner performance. The data were organized and processed using Microsoft Excel, which facilitated systematic comparison across responses from both the oral tasks and the questionnaires.
- Qualitative analysis focused on the nature and patterns of mispronunciations as observed during the oral interview tasks. This involved examining phonetic accuracy, fluency, rhythm, and intonation, with attention to the influence of learners' first languages. Additionally, insights from semi-structured interviews with linguistics lecturers were analyzed thematically to provide expert perspectives on students' recurring phonetic challenges and the underlying causes.

By triangulating data from self-reported questionnaires, expert interviews, and direct oral performance, this analytical approach ensures a robust and context-sensitive evaluation of EFL learners' pronunciation difficulties.

3.6 Ethical Considerations

Ethical concerns were thoroughly considered during the research process. All participants (lecturers and students) provided informed consent, which ensured their voluntary involvement and understanding of the study's aim and procedures. Specific information provided to participants included details about the research purposes. Participants were told that their responses would be confidential and anonymous, and their information was securely preserved to maintain their privacy. This approval was contingent on continuous ethical oversight throughout the study to address unforeseen issues.

CHAPTER FOUR

Findings and Discussion

The research conducted at Cihan University in Erbil, Kurdistan, provides valuable insights into the phonetic challenges faced by Kurdish and Arabic-speaking English as a Foreign Language (EFL) learners. The study identified several key pronunciation difficulties:

The study employed a mixed-methods approach, combining descriptive statistics and questionnaire data to explore the pronunciation challenges faced by English as a Foreign Language (EFL) learners at Cihan University in Erbil, Kurdistan. The findings are presented in two main sections: (1) descriptive statistics on pronunciation challenges and (2) questionnaire responses on learners' perceptions and attitudes toward phonetic. This demographic distribution allowed for a focused exploration of the phonetic struggles specific to Kurdish EFL learners, while also providing insights into the challenges faced by Arab learners. Table 2 summarizes the overall descriptive statistics for each test item, highlighting the key pronunciation difficulties encountered by the participants:

Table 2: Overview of Pronunciation Challenges

Category	Total Participants	Arab Participants	Kurdish Participants	Other Language Participants
Total Participants	45	10	34	1
Pronunciation Challenges				
Vowel Length	42	-	-	-
Consonant Cluster (Inserting Schwa)	43	-	-	-
Stress and Intonation	42	-	-	-
Kurdish Difficulty with /θ/ & /ð/ Sounds	27	-	27	-
Kurdish and Arab Difficulty with /ʒ/ Sound	29	14	15	-
Arab Difficulty with /p/ Sound	7	7	-	-
Arab Difficulty with /v/ Sound	10	10	-	-

4.1 Descriptive Statistics on Pronunciation Challenges

The majority of participants were Kurdish (34 out of 45), reflecting the demographic context of the research location, with a smaller representation of Arab students (10) and one participant from another linguistic background.

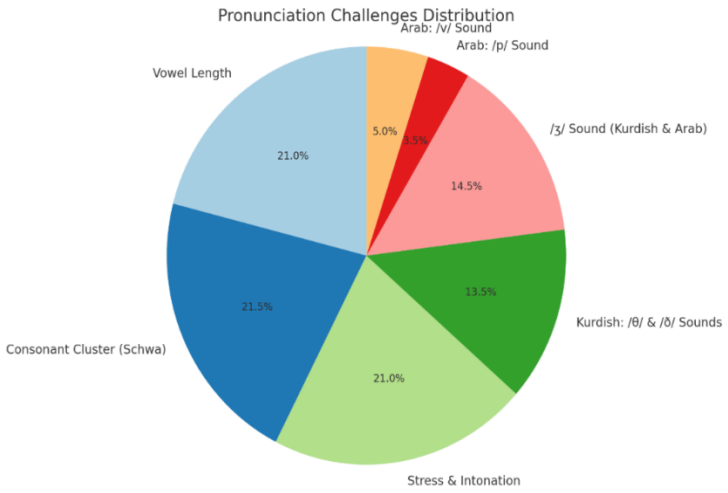

Figure 1: Pronunciations Challenges Distribution

Key Findings:

Vowel Length: Approximately 93% of participants struggled with vowel length, particularly in distinguishing between short /ɪ/ and long /iː/ sounds (e.g., *bit* vs. *beat*). This difficulty likely stems from the absence of such vowel length distinctions in Kurdish and Arabic.

Consonant Clusters: Around 96% of participants inserted schwa sounds when pronouncing consonant clusters, a phenomenon known as epenthesis. This suggests a transfer from their native phonological systems, where consonant clusters are rare or simplified.

Stress and Intonation: A significant majority (93%) faced challenges with English stress and intonation patterns, likely due to the syllable-timed nature of Kurdish and Arabic compared to the stress-timed rhythm of English.

Kurdish-Specific Challenges: Approximately 79% of Kurdish participants struggled with the dental fricatives /θ/ and /ð/, which are absent in Kurdish. Additionally, 64% of participants (both Kurdish and Arab) faced difficulties with the /ʒ/ sound, which is not present in either language.

Arab-Specific Challenges: Arab participants struggled with the /p/ and /v/ sounds, which are absent in Arabic, often substituting them with /b/ and /f/, respectively

Table 3:

Survey Question	Yes	No
Does the mother tongue influence pronunciation?	31	14
Do phonetic skills contribute to speaking confidence?	34	11
Does knowledge of phonetics enhance communication?	23	22
Do you practice pronunciation outside of university?	11	34
What are the best resources for improving pronunciation?	20 (Technology)	25 (Classroom)
What motivates you to learn phonetics?	27 (Personal Interest)	18 (Academic Success)

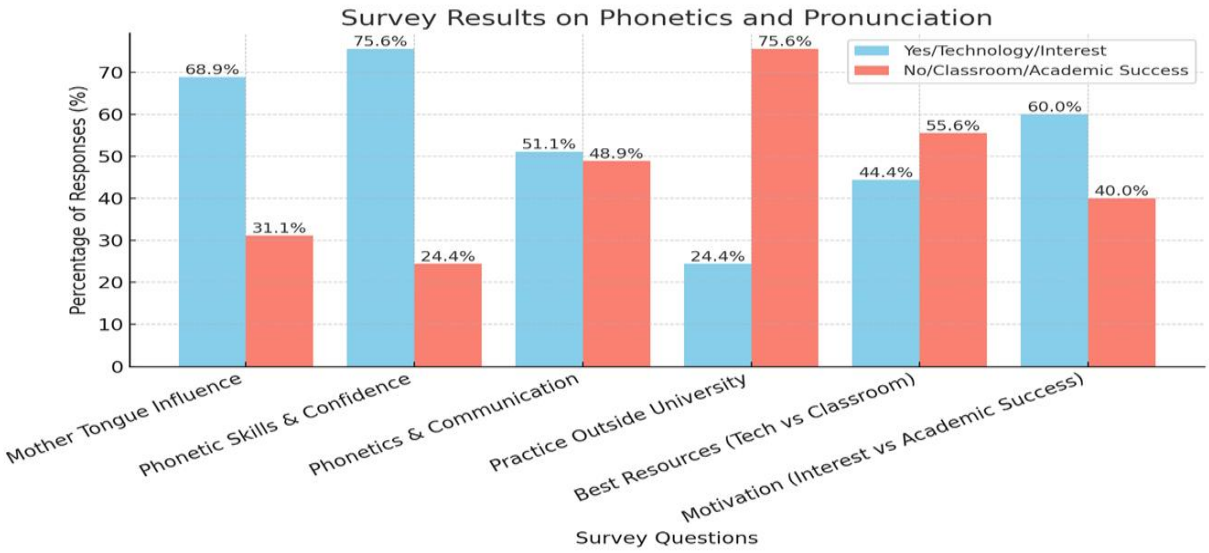

Figure 2: Survey Results

4.2 Questionnaire responses on learners' perceptions and attitudes toward phonetic

Based on the chart the percentages of the students indicate the following:

a. Influence of Mother Tongue on Pronunciation

- **Yes**: 31 participants (69%) **No**: 14 participants (31%)

  A large majority of participants acknowledged that their mother tongue influences their pronunciation. This aligns with the descriptive findings, which highlight specific phonetic challenges rooted in the participants' native languages (e.g., /θ/, /ð/, /ʒ/). The influence of first language (L1) phonetic patterns on second language (L2) pronunciation is a well-documented phenomenon, often leading to mispronunciations or accents.

b. Phonetics and Speaking Confidence

- **Yes**: 34 participants (76%) **No**: 11 participants (24%)

  Most participants felt that mastering phonetics positively impacts their speaking confidence. This suggests that learners recognize the importance of proper pronunciation in feeling competent and confident while speaking English, reinforcing the value of phonetic awareness in language acquisition.

c. Phonetics and Communication enhancement:

- **Yes**: 23 participants (51%) **No**: 22 participants (49%)

  The responses were nearly balanced, with a slight majority agreeing that phonetics enhances communication. This indicates that while some learners see clear value in mastering pronunciation for effective communication, others may prioritize vocabulary, grammar, or fluency. This divergence highlights the need for greater awareness of the role of phonetics in overall communicative competence.

d. Pronunciation Practice Outside University

Yes: 11 participants (24%) **No**: 34 participants (76%)

A significant majority of participants do not practice pronunciation outside of university. This lack of engagement with independent language practice may hinder their progress in mastering phonetic skills, as consistent practice is crucial for improving pronunciation

e. Best Resource for Improving Pronunciation

- **Technology**: 20 participants (44%) **Classroom**: 25 participants (56%)

While both resources were valued, classroom learning was slightly more favored. This suggests that participants prefer structured, guided environments for learning pronunciation, though technology is also seen as a helpful supplementary tool. This finding underscores the importance of integrating both traditional and technological resources in phonetic instruction.

f. Motivation for Learning Phonetics

- **Personal Interest**: 27 participants (60%) **Academic Success**: 18 participants (40%)

Personal interest emerged as the stronger motivation for learning phonetics, compared to academic success. This suggests that learners are intrinsically motivated to improve their speaking ability, though academic goals also play a significant role.

Recordings findings analysis

Phonetic Challenge

The analysis of the recordings reveals that Arabic and Kurdish EFL students struggle significantly with vowel length recognition and production. This difficulty can be attributed to the phonological structures of their native languages, which have fewer vowel contrasts compared to English. While Kurdish phonology shares more features with English than Arabic does, statistical analysis indicates that Kurdish EFL students exhibit greater difficulties in vowel pronunciation. This suggests that their challenges are not due to physical articulation issues, such as tongue placement, lip rounding, or dental positioning, but rather stem from a lack of systematic exposure and practice.

Table 4:

Language	Number of Vowels	Richness of Vowel System	Similar to English?
English	**~14 vowels (depending on dialect)**	**Very complex, includes short/long vowels & diphthongs**	✅ **Complex like Kurdish**
Kurdish (Sorani)	**9 vowels (short & long)**	**Has vowel length contrast, more variety than Arabic**	✅ **Closer to English**
Arabic	**6 vowels (Modern Standard Arabic: /i/, /a/, /u/, plus long versions)**	**More limited, only three core vowels**	❌ **Less similar to English**

Kurdish has a **richer vowel system** than Arabic, making it a better comparison for English. Specifically, vowel length, vowel contrasts, and rounded vowels present major obstacles. The findings suggest that Kurdish students' difficulties with monophthongs, diphthongs, and triphthongs arise not from a fundamental physiological limitation but from insufficient training and phonetic awareness. Since vowel production is primarily controlled by the vocal cords and the degree of mouth opening, the core issue lies in the absence of structured practice and explicit instruction rather than an innate articulatory constraint.

In contrast, both Arabic and Kurdish EFL learners encounter considerable difficulties with consonant sounds that do not exist in their respective language systems. A particularly persistent challenge is the tendency to insert an epenthetic schwa in consonant clusters, both word-initially and word-finally. This phenomenon occurs because neither Arabic nor Kurdish allows complex consonant clusters exceeding two sounds, making it difficult for learners to adapt to English phonotactics.

Phonological and Cognitive Factors

From a phonological perspective, the difficulties extend beyond segmental phonemes to suprasegmental features. The students struggle with key aspects of connected speech, including stress patterns, intonation, assimilation, elision, and linking. These issues indicate a deeper phonological challenge rooted in cognitive and psycholinguistic factors. A major contributing factor appears to be a lack of foundational understanding of phonetics and phonology, leading to difficulties in processing spoken language in real-time.

Moreover, the psycholinguistic system—particularly subconscious language processing—plays a role in these challenges. Students exhibit cognitive overload when dealing with connected speech, leading to misinterpretations and inconsistencies in their pronunciation. This suggests that their difficulties are not merely mechanical but involve deeper issues of phonological awareness and speech perception.

Educational implications derived from the analysis of recordings.

Students' responses to questions regarding their phonetics education indicate dissatisfaction with the current curriculum and teaching methodologies. Many report a lack of explicit instruction and insufficient clarification from instructors, as well as an absence of clear objectives for studying phonetics. This gap in phonetic training may explain their struggles with both segmental and suprasegmental features of English pronunciation. A more structured and practice-oriented approach, incorporating both theoretical knowledge and applied phonetic exercises, could enhance their phonological awareness and pronunciation skills

Lecturers- Interview Findings

Most Frequent Pronunciation Difficulties experienced by English language instructors are : The Mother Tongue Influence, Consonant Cluster Epenthesis,[R] Insertion, Irregular Past Tense Forms, Language System Varieties, Diphthongs or complex vowel sounds, and Vowel Length Issues specifically to Kurdish learners of English. On the other hand, lecturers recommended Advice for Addressing Pronunciation Difficulties the Awareness of Pronunciation Limitations, Utilizing Additional Resources and Training, Encouraging Transfer from L1: Being mindful of the influence of the first language and guiding learners to minimize negative transfer, Promoting Professionalism, Focusing on Stress Patterns, to improve pronunciation clarity.

To address these challenges, several effective strategies are suggested by reliable linguist lecturers through the mentioned interview:

- Explicit Instruction: Teaching phonetic rules and pronunciation explicitly helps learners develop accurate articulation.
- Technology Integration: Language learning apps and online tools provide extra practice and real-time feedback, reinforcing classroom instruction.
- L1 Influence Awareness: Educators should address specific pronunciation issues arising from learners' first language to minimize negative transfer.
- Teacher Training: Continuous professional development in phonetics and pronunciation teaching enhances instructional effectiveness.
- Blended Learning: A combination of traditional classroom teaching and technology-based practice yields the best pronunciation improvements.

CHAPTER FIVE

We identified gaps in existing strategies by analyzing EFL learners' pronunciation challenges. Our approach integrates both cognitive (psycholinguistic) and articulatory (phonological) aspects, which are often studied separately.

5.1 A Psychophonetic Approach to EFL Pronunciation: A New Perspective

This research led to an important realization about pronunciation in diagnosing both the challenges and strategies. Beyond the findings of this study, an important realization emerged: the integration of psycholinguistics and phonology—the term here as a 'psychophonetic approach'—has the potential to the dominant mispronunciation challenges and to reshape EFL pronunciation training as well. Another search was done after transcribing the students' recordings and the lecturers' interviews as for the two indicate the same reason as the dominant mispronunciation causes which is the first language interference and then late exposure to the second language the search shows that psycholinguistics is highly relevant to both first-language (L1) interference in pronunciation and phonology because Psycholinguistics studies how the mind processes language, including speech production, perception, and acquisition, as a result, L1 interference happens because the brain automatically applies phonological rules from the first language when speaking a second language (L2), So Learners often subconsciously substitute unfamiliar L2 sounds with similar L1 sounds due to cognitive ease. Mental representations of phonemes are shaped by L1 exposure, affecting the way learners hear and produce sounds in L2. Because pronunciation difficulties arise from the brain's difficulty in distinguishing L2 phonemes that don't exist in L1. For example, Arabic and Kurdish speakers may struggle with English /p/ vs. /b/, /θ/ & /ð/ because their L1 lacks a voiceless bilabial plosive (/p/) nor the dental fricatives /θ/ & /ð/. This is a psycholinguistic issue because their brain categorizes both as /b/, and /θ/ & /ð/ as /z/and /s/ causing mispronunciations. Speech Learning Model (SLM) (Flege, 1995): This model posits that L1 phonetic categories influence L2 speech perception and production. If an L2 sound is perceived as similar to an L1 sound, the learner may assimilate it into the existing L1 category, leading to pronunciation errors. Perceptual Assimilation Model (PAM) (Best, 1994): This model explains how L1 phonological categories shape L2 perception. When L2 sounds are unfamiliar, learners categorize them based on their closest L1 equivalents, resulting in

phonetic distortions. Another study Perceptual Assimilation Model (PAM) (Best, 1994): This model explains how L1 phonological categories shape L2 perception. When L2 sounds are unfamiliar, learners categorize them based on their closest L1 equivalents, resulting in phonetic distortions.

5.2 Connection Between Psycholinguistics and Phonology:

Phonology is the study of sound systems and patterns in languages. Psycholinguistics interacts with phonology through:

- Phonological Processing: How the mind organizes and retrieves sound patterns.
- Phonotactic Constraints: The subconscious rules restricting which sound combinations are allowed in L1. For example, Arabic and Kurdish speakers insert a schwa epenthesis (e.g., "school" → "iskool") because their phonological system avoids initial consonant clusters.
- Connected Speech Challenges: Stress, intonation, assimilation, and elision require automatic processing of phonological rules, which can be difficult if L1 has different patterns.

The late exposure to the second language as a mispronunciation factor necessitates relating it to a deeper reason to find then a more practical solution.The Critical Period Hypothesis (Lenneberg, 1967) suggests that language learning, particularly phonology, becomes significantly more challenging after puberty due to neuroplasticity constraints. Birdsong (1999) reviewed evidence supporting the idea that late L2 learners experience greater difficulty achieving native-like pronunciation, emphasizing that age-related changes in brain function contribute to reduced phonetic adaptability.

Strategies

To relate psycholinguistics and phonology as a strategy for enhancing EFL pronunciation, we can focus on psychophonetics—the intersection of psycholinguistics and phonology—which examines how cognitive processes influence speech perception and production. integrating both fields into a comprehensive pronunciation strategy:

1. Perceptual Training (Psycholinguistics + Phonology)

- Psycholinguistic Basis: According to the Perceptual Assimilation Model (PAM) and the Speech Learning Model (SLM), learners struggle with distinguishing L2 phonemes because their brains categorize them based on L1 sounds.

- Phonological Application: High-variability phonetic training (HVPT) can train learners to recognize and produce difficult phonemes, rewiring phonological perception and improving pronunciation.

2. Motor Cortex Activation for Pronunciation (Neurolinguistics + Phonology)

- Psycholinguistic Basis: fMRI studies show that pronunciation errors stem from deep-seated neuromuscular patterns formed by L1 articulation habits.
- Phonological Application: Explicit phonetic instruction focusing on articulatory training helps retrain muscle memory for accurate pronunciation.

  Example Strategy:
- Use visual articulatory models (videos, IPA charts, tongue placement diagrams).
- Encourage shadowing techniques, where students imitate native speakers in real time to develop phonetic accuracy.

3. Cognitive Load Reduction for Fluency (Working Memory + Phonology)

- Psycholinguistic Basis: Cognitive Load Theory suggests that L2 pronunciation errors often arise because learners allocate too much cognitive effort to pronunciation while speaking.
- Phonological Application: Teaching pronunciation in chunked prosodic units (connected speech, intonation patterns) reduces cognitive load and improves fluency.

  Example Strategy:
- Train students on stress-timed rhythm vs. syllable-timed rhythm (e.g., English vs. Arabic/Kurdish pronunciation patterns).
- Use prosody drills (e.g., marking intonation contours in sentences)
- Flege, J. E., Munro, M. J., & MacKay, I. R. (1997). Factors affecting strength of perceived foreign accent in a second language
- Kuhl, P. K. (2000). A new view of language acquisition.
- Lenneberg, E. H. (1967). Biological foundations of language.
- Major, R. C. (2001). Foreign accent: The ontogeny and phylogeny of second language phonology.
- Strange, W., & Shafer, V. L. (2008). Speech perception in second language learners: The re-education of selective perception.

CHAPTER SIX

Conclusion & Recommendations

Psycholinguistics directly relates to L1 **interference** in pronunciation because it explains the cognitive mechanisms behind phonological transfer from L1 to L2. It also connects with phonology because phonological structures are mentally processed and stored, affecting pronunciation and speech production. By integrating psycholinguistics and phonology, a multi-layered strategy that enhances EFL learners' pronunciation can be developed. This approach reprograms phonetic perception, retrains articulation, and optimizes cognitive resources, ultimately leading to more native-like pronunciation. This approach is highly recommended for future research or to apply it as a new framework for teaching pronunciation, because this approach addresses L1 interference differently than existing methods. As a fundamental component of language acquisition, phonetics should receive greater emphasis in EFL instruction. Teachers must first establish awareness of its significance before beginning instruction. Phonetics teaching should be practical rather than purely theoretical, reflecting its application in real speech. Instead of rigidly adhering to the curriculum, each topic should be introduced through experiential learning, incorporating auditory and visual tools featuring native speakers. This approach can create an immersive learning environment, enhancing students' engagement and motivation.

Furthermore, students should be trained in IPA transcription and gain a solid foundation in phonetics before progressing to phonology. Classroom activities should include listening to native speakers, guided reading exercises, and corrective feedback from instructors. Utilizing teaching videos and structured pronunciation exercises will significantly enhance learners' ability to manage pronunciation and navigate the complexities of the L2 sound system.

Researcher's Insight

Final Reflection: Reframing Pronunciation as Cognitive and Biological Nature of Pronunciation

A Researcher's Insight into Pronunciation: The Systematic and Biological Connection

Understanding Pronunciation: A Balance of Mind and Speech

Mechanisms

My Final Thoughts on Pronunciation: A Dual Perspective

Through this research, we have concluded that pronunciation is both systematic and physical. At first, I believed pronunciation challenges were mainly a psycholinguistic issue—rooted in how the mind processes and controls speech. However, after deeper analysis, I realized that pronunciation is also a biological and physical process, meaning it is both programmed in the mind and shaped by the way speech organs function.

From the systematic side, pronunciation is controlled by the subconscious mind, which organizes speech patterns and makes them automatic. This explains why fossilization happens—once a pronunciation habit is formed, it becomes part of a stable system that resists change. This also connects to L1 interference, where the first language affects how new sounds are learned in a second language.

From the physical side, pronunciation is about how the vocal cords, tongue, lips, and other speech organs move. A speaker naturally produces sounds that require the least amount of effort based on their mother tongue. This is why pronunciation challenges exist—not because a person cannot produce a sound, but because their articulatory habits make it difficult to adjust.

A key finding is that pronunciation is not tied to any specific language. It is a general issue that affects every language learner, not just English learners. In regions like Iraq, where Arabic and Kurdish coexist, pronunciation differences are influenced not only by language but also by dialects, accents, and social background. For example, a speaker from Baghdad may have a different pronunciation system from someone in Mosul, even if they speak the same language. So, why is pronunciation complex? There are two reasons:

1. Because it is a universal issue, not just related to English or a specific curriculum.

2. Because it is shaped by ease—speakers naturally make the simplest articulatory movements based on what they are used to.

Another important aspect is that pronunciation is individual. Every person has their own idiolect—a unique way of speaking that includes pitch, voice quality, and speech rhythm. This means pronunciation is both general (affecting all speakers) and specific (shaped by each speaker's habits and background).

The solution to pronunciation difficulties is acclimation and habituation—training the brain and speech organs to adopt new sounds. This can only happen through consistent exposure and practical, hands-on methods. Pronunciation teaching should focus on practice rather than theory, as it is a skill that requires repetition and muscle adaptation.

In the end, pronunciation is a mix of cognitive programming and physical adaptation. Understanding both aspects is the key to teaching and learning pronunciation effectively.

Implications for Research

This study highlights the role of psychophonetics in addressing pronunciation challenges faced by late L2 learners, offering a new perspective on integrating cognitive and phonological strategies.

Findings will contribute to understanding how L1 phonetic categories interfere with L2 pronunciation, reinforcing the need for targeted training programs.

Results may inform the development of perceptual and articulatory training methods to enhance pronunciation accuracy in EFL learners.

The study supports the use of technology-driven phonetic instruction, which can offer personalized feedback to learners struggling with pronunciation.

Research Limitations

Despite its contributions to understanding pronunciation challenges among EFL learners, this study is subject to several limitations that must be acknowledged. Firstly, the sample size was relatively small, comprising only 45 participants, which restricts the generalizability of the findings and limits the statistical robustness of the results. Additionally, the geographical and institutional scope was confined exclusively to students at Cihan University–Erbil, which narrows the contextual applicability of the study and may not adequately capture the experiences of EFL learners in different regions or academic environments. A notable imbalance in language group representation was also present, with

Kurdish participants (n=34) significantly outnumbering Arab participants (n=10), potentially skewing any comparative analysis between these cohorts. Another key limitation concerns the participants' limited exposure to native English input, which likely influenced their pronunciation abilities, suggesting that some of the identified difficulties may stem more from environmental factors than linguistic proficiency alone. The study's focus on third- and fourth-stage undergraduate students also means that insights into the developmental trajectory of pronunciation skills across different proficiency levels, particularly among beginners or postgraduate learners, remain unexplored. Lastly, although the research acknowledges the value of technological tools in pronunciation practice, it did not actively incorporate such tools (e.g., speech recognition software or interactive pronunciation applications) into its methodology, representing a missed opportunity to enrich data collection and learner engagement. Future research would benefit from addressing these limitations through broader sampling, more balanced participant demographics, expanded institutional contexts, and deeper technological integration.

References

Murcia, C., Brinton, D. M., & Goodwin, A. M. (1996). *Teaching English as a second or foreign language* (2nd ed.). Heinle & Heinle.

- **Reference link: Heinle & Heinle**

Wong, W. (1987). *The pronunciation of English in the context of the Asian learner*. Asian Journal of English Language Teaching, 1(1), 43–53.

- **Reference link: Asian Journal of English Language Teaching**

Lepore, M. (2014). *Corrective feedback in second language pronunciation: Issues and challenges*. English Language Teaching, 7(4), 15-27.

- **Reference link: English Language Teaching Journal**

Ferdiyanto, A. (2019). *Effective pronunciation instruction: Approaches and methods for teaching non-native speakers*. English Language Teaching, 12(5), 101-115.

- **Reference link: English Language Teaching Journal**

Hadith narrated by Imam Abu Dawud. *The Importance of Clear Speech*. In *Sunan Abu Dawood* (Hadith 4652).

- **Reference link: Sunan Abu Dawood (English Translation)**

Krashen, S. D. (1982). *Principles and practice in second language acquisition*. Pergamon Press.

- **Reference link: Principles and Practice in SLA**

- **Jenkins, J. (2000). *The Phonology of English as an International Language: New Models, New Norms, New Goals*. Oxford University Press.**
  - **Reference link: Oxford University Press - Jenkins**
- **Levis, J. M. (2007). *Pronunciation myths: Applying second language research to classroom teaching*. TESOL Quarterly, 41(1), 39-58.**
  - **Reference link: TESOL Quarterly - Levis**

1. **Lepore, M. (2014). *Corrective Feedback in Second Language Pronunciation: Issues and Challenges*. *English Language Teaching Journal*.**
   - **Link: English Language Teaching Journal**

Appendices:

Appendix A: Student Questionnaire Responses (item)

This appendix includes the raw responses collected from the student questionnaire, which was distributed to 45 participants (both Kurdish and Arabic EFL learners) to gather insights into their pronunciation challenges, learning strategies, and perceptions of phonetics. The questionnaire was divided into three sections:

1. **Section 1: Participant Information**
   - Demographic details such as age group, gender, first language, year of study, and English proficiency level.
   - Linked to **Table 1** (Overview of Pronunciation Challenges) and **Charts 1–6**.
2. **Section 2: Open-Ended Questions**
   - Responses to questions about the most challenging aspects of English pronunciation, techniques or resources used to improve pronunciation, and examples of difficulties faced by students.
   - Linked to **Table 3** (Phonetic Challenge Analysis).

3. **Section 3: Closed-Ended Questions**
    - Quantitative data from questions about specific English sounds that students find difficult to pronounce, frequency of pronunciation practice, and the role of phonetics in improving communication skills.
    - Linked to **Tables 1–3** and **Charts 1–6**.

Dependencies:

- Provide raw data for **Table 1** (Overview of Pronunciation Challenges), **Table 2** (Survey Responses on Learners' Perceptions), and **Table 3** (Phonetic Challenge Analysis).
- Supports the findings on vowel length, consonant clusters, stress, intonation, and L1 interference discussed in **Chapter 4** .

Appendix B: Professor Questionnaire Responses

This appendix contains detailed responses from lecturers who participated in the study. These responses offer qualitative insights into the strategies used to address pronunciation challenges and the lecturers' observations about common difficulties faced by students.

1. **Section A: General Observations**
    - Responses to questions about frequent pronunciation difficulties, the influence of learners' native languages, and specific English sounds that are challenging due to L1 interference.
    - Linked to **Table 1** (Overview of Pronunciation Challenges).
2. **Section B: Consonant and Vowel Sounds**
    - Lecturers' feedback on the most challenging consonant and vowel sounds, as well as their methods for addressing these issues.
    - Linked to **Table 3** (Phonetic Challenge Analysis).
3. **Section C: Stress, Intonation, and Connected Speech**
    - Insights into how students handle word stress, sentence stress, and intonation patterns, along with the teaching of connected speech features like linking, assimilation, and elision.
    - Linked to **Table 3** (Phonetic Challenge Analysis).
4. **Section D: Pronunciation Training and Strategies**
    - Details about the tools and methods used to improve pronunciation, including

phonemic transcription and technology integration.

- Linked to **Charts 1–6** .

5. **Section E: Classroom Challenges and Suggestions**
    - Responses to questions about the main challenges in teaching pronunciation and suggestions for additional resources or training.
    - Linked to **Chapter 5** (Self-Effort Discovery).
6. **Section F: Open-Ended Questions**
    - Advice for new lecturers and success stories shared by experienced educators.
    - Linked to **Chapter 6** (Conclusion & Recommendations).

Dependencies:

- Provides qualitative data for **Table 3** (Phonetic Challenge Analysis) and **Charts 1–6** .
- Supports the discussion on psychophonetic approaches and instructional strategies in **Chapter 5** .

Appendix C: Interview Transcripts with Lecturers

This appendix contains verbatim transcripts of interviews conducted with linguist lecturers specializing in phonetics and pronunciation. These interviews provide deeper qualitative insights into the challenges and strategies associated with teaching pronunciation to Kurdish and Arabic EFL learners.

Dependencies:

- Linked to **Table 3** (Phonetic Challenge Analysis) and **Chapter 5** (Self-Effort Discovery).

Appendix D: Raw Data from Oral Tests , remove?

This appendix includes the raw data from the oral tests administered to participants. The data is presented in tabular form, showing individual scores and performance metrics for tasks such as reading drills, tongue twisters, and stress/intonation exercises.

Dependencies:

- Linked to **Table 1** (Overview of Pronunciation Challenges) and **Table 3** (Phonetic Challenge Analysis).