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| RESEARCH ARTICLE

Analytical Study of Iraqi Students' English Consonant Pronunciation Errors

Qahtaan Mushrif Hamed
Ministry of Education, Anbar, Iraq

Corresponding Author: Qahtaan Mushrif Hamed, **E-mail**: qahtaanmushrif@gmail.com

| ABSTRACT

It is useful to diagnose the difficulties with pronunciation that second language (L2) learners have in order to ascertain the type of training that is necessary. By analyzing the test scores of Iraqi EFL students and finding out which English consonant phonemes and clusters they have the most trouble with, this study hoped to shed light on the challenges faced by Arab students when trying to pronounce English consonants correctly. Forty Iraqi female college students participated in the study; twenty volunteers were assigned to a lower-intermediate and twenty to an intermediate English proficiency level. Their mistakes in pronouncing specific groups of consonants in various word locations were highlighted using a four-part productive pronunciation test. The data analysis revealed that the following sounds—/ʌ/, /ɘ/, /p/, /ɴ/, and /ʧ/—as well as the regular past tense morphemes -ed (/t/ and /d/), and clusters of three and four consonants—contributed the most to the participants' pronunciation errors. And when it came to cluster and consonant sound pronunciation, lower-intermediate students were even more prone to making a fool of themselves than intermediate students. Also, learners' errors varied more in the beginning positions of words than in the middle or end ones. Consonants that are in the beginning or end of words are more prone to be difficult to pronounce than those that are in the center, according to the research.

| KEYWORDS

Iraqi students, Arab students learning English, English pronunciation, consonant pronunciation errors

| ARTICLE INFORMATION

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1. Introduction

Accurate pronunciation is a crucial element of communication, as it ensures that speech is clear and easily understood. AlJumaily and AlMuselhy (2023). Conversely, mispronunciation could impede the process of learning a new language. Learning any language requires accurate pronunciation. The major differences between a target language and a learner's first language (L1) make target language pronunciation difficult for second language learners.

Articulation issues can impact all facets of language, including spelling. Nguyen (2007) delineates several ways in which a learner's native accent may affect their foreign accent. A variety of factors can have a substantial impact on how individuals pronounce words when learning a second language. The characteristics include age, self-motivation, gender, attitude towards the target language, and previous language learning experience.

Numerous studies, notably Nguyen (2007), have identified the main pronunciation issues faced by English-language learners. Several research have identified Arab language learners' common English pronunciation problems (AlJumaily & AlMuselhy, 2023).

The objective of of the following research was to examine the challenges faced by students in several Arabic-speaking countries, including Yemen, Jordan, Sudan, Oman, and Saudi Arabia, in their attempts to pronounce the English language.

Although numerous research have been undertaken revealing substantial discoveries about the difficulty Arab students of English have in spelling and pronunciation, it is essential to develop a more precise understanding of these obstacles. This research reports the outcomes of a study aimed at assessing whether Iraqi learners learning English as a foreign language

encountered difficulty with the pronunciation of English consonants. This strategy was implemented to elevate such a profile. This section summarizes the issues Arab students face in pronouncing English consonants and the various factors contributing to these difficulties. This component is supplied in alignment with the objectives of the ongoing inquiry.

2. *The English and Arabic consonants*

Consideration of distinctions between L1 and L2 linguistics is crucial when examining how individuals learn new phonological systems. As is commonly known, the accent of a person speaking a second language is a reflection of their first language. The phonetics of Arabic and English are very different. One of the South-Central Semitic languages is Arabic. Aramaic and Hebrew are close relatives. English is related to West Germanic Indo-European languages Al-Huri (2015. Arabic is derived from Central South Semitic languages. These phonological variances could make it hard for Arab students to pronounce consonants in English. There are various distinctions between Arabic and English consonants. Different from English, Arabic has twenty-seven consonants. The largest number of consonants in the Arabic and English languages are the same.
, with the exception of a small number of letters. Unlike pronounced consonants from one language, which are more difficult to learn, "consonants that are present in both languages can be acquired by second language learners with relative ease," according to El Zarka (2013). No English consonants like /p/, /v/, /g/, or /ʃ/ can be found in Modern Standard Arabic.
Consonant clusters, a syllable structure characteristic that indicates a group of consonants without an intervening vowel, are different in the two languages' phonological systems, with the exception of a few consonants (Al-Shuaibi, 2009). A word can begin or end with it. Arabic words have two-consonant clusters at the end but not at the beginning (Amer, 2010). However, English enables terminal clusters of two, three, or four consonants (paint, painted, circumstances) as well as two or three (print, spring).
Therefore, when Arabic is contrasted with English, it possesses a more limited collection of consonant combinations. Due to the abundance of consonant clusters in the English language, Arab EFL/ESL students may find themselves inserting vowels into previously stringed consonants (Ammar & Alhumaid, 2009).
Because of the disparities in the writing systems, Arab learners find it difficult to pronounce English consonants correctly. There are two orthographic depths in Arabic, according to El Zarka (2013): Deep, un-vowelized script and shallow, vowelized script. Arabic as spoken and Standard Arabic are the two linguistic registers what make Arabic unique. But there's more to the English spelling system than just the correspondence between letters and sounds. According to Na'ama (2011), the intricate orthographic system of English permits a great deal of letter variety and the representation of different sounds. Reason being, it permits a great deal of phonetic spellings. There are several exceptions to the majority of spelling norms (Bascatetti, 2009). No matter how you say it, the suffix -s colu can be heard as either the regular plural, the third-person singular with a simple present, or both in spoken English. Nevertheless, the morpheme is spelled single in written Arabic. Because of this irregularity, non-native speakers of English have a hard time pronouncing consonant. Consonant pronunciation issues among Arab English learners are legitimate concerns. Why is this? Because the phonological systems of Arabic and English are different when it comes to consonant sounds and combinations. Obstacles and how often they occur have received very little academic attention. Read the next paragraph for more on this.

3. *Previous Studies*

A Number of studies have examined the problems non-Arab English speakers have pronouncing particular terms. Nguyen (2007) examined Vietnamese English learners' final consonant pronunciation errors. Five non-native English speakers assessed five elementary to high school students' pronunciation. This study found that Vietnamese learners of English added the schwa sound to word-final consonants or used phonemes that resembled Vietnamese consonants. In another study, Varol (2012) explored how Turkish phonology affects the pronunciation of Indo-European English sentences used for articulation in Turkish. Considering Turkish individuals' limited use of English phonemes /ɾ́/, /ɻ/, /œ/, and /t/ in their home language, this study indicates poor pronunciation. The pupils made the most similar Turkish phonemes t, d, and r instead. Centerman and Krausz (2011) examined Swedish schoolchildren's pronunciation errors of English phonemes /ɾ́/, /ð/, /ʃ/, and /ɷ/ in various word situations. Perhaps because these sounds are absent in Swedish, According to the results, learners of the Swedish language encounter greater difficulty pronouncing English words when they are in the initial position as opposed to when they are in the final position. Students who are learning English in the Czech Republic frequently struggle to correctly articulate dental fricatives (/ś/ and /ð/), bilabial approximants (/w/), velar nasals (/Ŭ/), and aspirated plosives (/p/, /t/, and /k/) (Ambrozová, 2014).
). The trainees' native phonetic system caused these pronunciation issues, the study showed. These studies found that L1 and L2 consonant pronunciation discrepancies were largely attributable to phonological systems.
The researchers examined Arab ESL students' consonant pronunciation issues. This study supports the idea that Arabic dialects and Arab origins affect English mispronunciation. Barros (2003) explored the challenges six Arabic-speaking people who moved to the US during puberty, focusing on pronunciation issues in English as a Second Language (ESL). The study found that learners most often mispronounced /ʌ/, /p/, /v/, /d/, and /ɔ/ consonants. Due to their original language dialects, the learners had distinct consonant pronunciation difficulties. Arab English students inserted "a short vowel" at the beginning and end of several syllables, according to Al-Saidat. This happened in Jordan. In contrast, Na'ama (2011) found that Yemeni University students had trouble

pronouncing English clusters of three or four terminal consonants. Arabic segmental characteristics lack these clusters. Hassan (2014) revealed that Sudanese English students have trouble pronouncing opposite consonants. Included consonant sounds: /z/, /ð/, /s/, /Ÿ/, /b/, /p/, /ɔ/, /tʃ/.

Most research have focused on Arab first-year English learners' pronunciation problems. AL-Jasser (1978) discovered that Iraqi English students struggle with sounds like /p/, /v/, /g/, /r/, /ɧ/, /ə/, and /ʌ/. Arabic lacks phonemes for these sounds. Binturki (2008) discovered that Iraqi students struggle with pronouncing voiced interdental fricatives /v/, /p/, and /œ/ in ESL. Students' word positions also contribute to these issues. Ammar and Alhumaid examined how Najdi How Arabic affects Iraqi women's undergraduate English consonant and cluster learning in 2009.

A number of Iraqi studies have investigated the difficulties that English students experience with pronunciation. A study was conducted on Iraqi English learners, focusing on their ability to recognize harsh sounds such as /p/, /v/, /g/, /r/, /ʧ/, /ə/, and /ó/. due to the fact that these phonemes are not found in Arabic alone. Binturki (2008) states that Iraqi learners encounter difficulties when it comes to pronouncing voiced interdental fricatives such as /v/, /p/, and /œ/ while they are learning English as a Second Language.

The difficulties lie in placing these sounds in words. Al-Ani (1970) showed that Arabic. phonetic interference impacted Iraqi female students' English consonant and cluster comprehension. Their research examined the phonetic properties of sounds /p/, /v/, /Ō/, /ɧ/, /ð/, /Ÿ/, /r/, and /l/ in words at various stages (beginning, middle, and final). This study showed how L1 interference affects Arab ESL pupils. Ahmad (2011) found that Arab English learners struggle with pronunciation of consonant phonemes /p/, /d/, /v/, /ɧ/, /ʒ/, and /Ō/. Ahmad and Nazim (2013) studied the use of the voiceless postalveolar affricate /ɧ/ in English by Arabic ESL students in 2013, using the Common Arabic Heritage (CAH). The study found that trainees had trouble pronouncing the phoneme /ɧ/ correctly. The phoneme /н/ was frequently substituted, particularly at word ends. Ahmad and Nazim (2013) utilized an innovative approach to studying educators' views on Iraqi ESL students' consonant pronunciation in written English. The study found that teachers were surprised by students' mistakes when pronouncing /p/, /d/, /v/, /ɧ/, /ʒ/, and /Ō/ independently. Previous research have shown that English pupils struggle to pronounce consonants not found in Arab and non-Arab languages. The consonant distinctions between Arabic and English make Arabic learners of English more likely to struggle AlMuselhy, AlJumaily (2024). Thus, more research is needed to determine what causes Arab EFL/ESL students' consonant pronunciation challenges and how to help them. A test that detects consonant pronunciation issues in various word situations is a dependable method. It's important to consider how these errors vary by student language proficiency. Due to these issues, this study examined them in Iraq. Two research questions were addressed in the study:

1- Which clusters and sounds of English consonants pose the most pronunciation difficulty to Iraqi female EFL students?

2-How do students of different linguistic abilities do when it comes to pronouncing English consonants?

4. Method

4.1 Participants in the Study

Forty Iraqi female students participated in this study. Data was collected at an Iraqi university with undergraduate students. Participants were 19–24 years old during data collection. Twenty students made up each of the two participant groups. The first group had intermediate-level English proficiency, whereas the second group had lower-intermediate. Language proficiency was assessed in Level 4 sessions for intermediate students and Level 1 classes for lower-intermediate students. Each participant attended four 45-minute weekly English classes in Iraqi schools for six years before attending university. Volunteers gave informed consent before data collection for the research study.

4.2 A Study of English Consonant Pronunciation

This research used a comprehensive English consonant pronunciation evaluation to assess participants' oral skills. The test was developed by examining Ammar and Alhumaid (2009), Binturki (2008), Barros (2003), and Ahmad (2011) tools. Three test modifications resulted from the authors' talks. See the appendix for a list of words from each of the four sections of the final exam document. The essay begins with 30 words with 10 difficult phonemes. The sounds mentioned include /p/, /v/, /ʧ/, /ʤ/, /ŋ/, /ʒ/, /ɹ/, /l/, /ð/, and /θ/. These phonemes appear in the beginning, middle, and end. A notable exception is the /ʒ/ sound, found only in medial and terminal word positions. Only the sound /ŋ/ was evaluated, excluding the terminal position. Twenty words distracted too. Due to their absence in Arabic phonology, these ten sounds were important. Arab students learning English may struggle with these 10 consonant sounds due to the differences between Arabic and English phonological systems, according to studies. Parts two and three focused on the phonetic representation of the morpheme -s, which is used as a simple present suffix in normal plural and third-person singular. You can pronounce the morpheme -s as [s], [z], or [ɪz]. The morpheme -ed in the past tense can be expressed as [d], [t], or [ɪd] in phonetics.. Along with the six distractor words, these two segments have sixteen words, eight per morpheme. Twelve words are used to assess English consonant cluster articulation issues in the fourth section. Consonant clusters were tested with six initial words and six additional words. Additionally, six terms were used as diversions. Two-consonant (CC) and three-consonant (CCC) clusters in the beginning position were used to evaluate learners' consonant cluster articulation in initial and final word positions. In contrast, final positions used two, three, and four consonant clusters (CC, CCC, and CCCC). Thus, the assessment covered five consonant cluster categories.

4.3 Techniques for Data Collection and Analysis

Both the people and the institution were asked to provide their informed consent before any data collection could commence. The researcher briefed the participants about the study's goals and methods before beginning data collection. In addition, the researcher reassured the participants that the exam would only be utilized for academic and research purposes. Each participant's college provided a private room for the administration of the pronunciation test. Students were instructed to read the four word lists silently for six minutes to familiarize themselves with them, in addition to receiving a paper copy of the test. Next, the researcher read the terms from each list aloud to the participants and recorded their pronunciation using a high-sensitivity recorder.

Any time a participant in the study felt they had misunderstood anything, they were allowed to reread it.

After the data collecting was finished, digital sound files were employed for the recording process and later tagged independently with numbers like "S1, S2" and so on. The goal was to make it easier for people to obtain the information while still making sure the students' identities would be safe. Following this, the two writers collaborated to analyze the tapes. To facilitate phonetic transcription, the International Phonetic Alphabet (IPA) was employed for every one of the target sounds. The data was computed after an investigation of the pupils' pronunciation performance. When someone got the pronunciation wrong, they got a score of 1, and when they got it right, they got a score of 0. For each participant, the number of pronunciation errors was recorded and converted into a percentage. Afterwards, for each cluster of difficult consonants and phonemes, the average proportion of incorrect pronunciations were determined. throughout all of the different word locations used in the various groups.

5. The Findings of the Research

Here in the data section, you may see a report detailing the students' performance on the pronunciation test. Before presenting these findings, the two research questions are carefully considered. The first portion of the presentation is a numerical breakdown of the results from the participants' pronunciation analysis. The second portion that's displayed is a comparison of the participants' pronunciation errors, broken down by their language proficiency levels.

5.1 Student Consonant Mispronunciations

Here the author details how often the participants flubbed the ten difficult consonants, the regular plural and simple present morphemes -s and -ed, past tense suffixes, and clusters of consonants. In Table 1 we can see how often the participants got the pronunciation of the 10 difficult consonants wrong. A large number of these consonant sounds were difficult for the participants to pronounce in English, as shown in the table.

Pronouncing six consonants was the most problematic for participants. Voiced postalveolar fricative /ɒ/ (50%), voiced velar nasal /ʊ/ (30%), voiceless bilabial plosive /p/ (65.30%), voiced alveolar approximant /œ/ (66.19%), voiced interdental fricative /ð/ (17.15%), and voiceless postalveolar affricate /ɧ/ (48.83%) were the consonants with the highest mistake rates. Even while it happened less frequently, the other four consonants were likewise wrong. A mistake rate of 11.73% is recorded for the voiced labiodental fricative /v/ and 10.57% for the voiceless interdental fricative / θ /. The mistake rate for the voiced velar plosive /g/ is 18.70% and for the voiced alveolar lateral approximant /l/ it is 19.60%.

Table 1. Rates of difficult consonant mispronunciation on average

Challenging consonant sounds	Initial	Medial	Final	All positions
/ʒ/	--	65.6%	78%	50.83%
/ŋ/	--	--	69%	30.00%
/p/	57.7%	73%	84%	65.30%
/ɹ/	56%	61.5%	85%	66.19%
/ð/	23.4%	15%	16%	17.15%
/ʧ/	28.5%	40%	50%	35.83%
/v/	17%	16.5%	10%	11.73%
/θ/	30%	3%	4%	10.57%
/l/	27.6%	17%	19%	19.60%
/g/	25%	18%	14%	18.70%

Word sound errors, as a proportion of the total, change as words go through a sentence. same data is also included in table 1, as shown. For example, in both positions the medial and terminal of words, the participants made more mistakes with the pronunciation of /p/ and /ɹ/ than they did in the initial position. Just like the medial and/or starting position of the letters /ɒ/, /ð/, and /l/, they made more pronunciation problems when they were inside the word-final position. When these phonemes are articulated in the starting position, there are more relative errors than when they are articulated in the medial and final locations. Among the 10 most-mispronounced sounds, the majority of test words located in word-medial positions do not contain any. with the exception of the /p/ and /g/ phonemes. This stands in stark contrast to the errors that occur when words are positioned at the beginning and end.

Table 2 shows the frequency with which the morphemes -s and -ed were mispronounced by participants as suffixes to regular plural, simple present, and past tense verbs.

The table shows that the most prevalent mispronunciations were /t/ and /d/ in -ed. The mistake rate was 71%. Participants often left off the morpheme, added a vowel, or replaced it with -d. The pronunciation of "champed" [tʃaempt] may have been [tʃaeʌmp] or [tʃæmpɪd]. The phoneme /ɪz/ had the second-highest pronunciation error rate (18%), following the morpheme -s. Participants made mistakes when pronouncing morphemes -s (/s/ or /z/) and -ed (/ɪd/). Participants tend to pronounce them as /s/ or /d/ and generalize their articulation. When the last consonant sound is followed by -s or -d, word-final consonant clusters arise, which caused the two morphemes' phonemes to be mispronounced.

Table 2. students' mean mispronunciation percentages for the morphemes -s and -ed in plural, simple present, and past tense suffixes.

-s			**-ed**		
/s/ or /z/	/ɪz/	Total mistakes	/t/ or /d/	/ɪd/	Total mistakes
14 %	18%	15%	71%	8%	36.5%

In Table 3, you can see the average percentage of speakers who mispronounce clusters of consonants in the beginning and ending positions of words. As indicated earlier, the participants' mispronunciation of word-final clusters (47.97%) is much larger than their mispronunciation of word-initial clusters (11.58%). Clusters of three or four consonants were also more frequently mispronounced than clusters of two consonants. This suggests that the difficulty of pronouncing these clusters grows as the number of consonants linked to them increases. With an error rate of only 0.83%, the participants performed best while pronouncing clusters of two consonants in word-initial position. This could be because, as pointed out by Al-Saidat (2010), Their Arabic dialect allows for a variety of consonant cluster patterns at the beginning of syllables.

The highest percentage of errors, 83.75%, are found in clusters of four consonants at the end of the word, while the lowest rate, 51.25%, is found in clusters of three consonants at the end of the word.

This is primarily due to the fact that cluster combinations like these have been observed in Arabic.

Table 3: Average percentages of pupils who mispronounce consonant clusters at the beginning and end of words**.**

Initial Clusters			**Final Clusters**			
CC.	CCC.	**Total mistakes**	CC.	CCC.	CCCC.	**Total mistakes**
0.85%	21.32%	12.59%	10.00%	51.27%	81.66%	48.93%

The authors found that many people articulated consonant clusters in two ways when reviewing their mistakes. Add vowels, then remove consonants. The study participants had to speak a brief vowel under certain conditions. For instance, they mispronounced "strap" (as [sɪtraep] or [stɪræp]) and "terms" (as [tərmɪz] or [tərʃmz]). The word "against" was mispronounced as [əgenɪsɪt] due to two vowels. Nothing like this has happened before. Speakers eliminated one or two cluster consonants. Medial consonants can be deleted, like "twelfths" (/twelfʂ/) becoming [twelfɪʸs] or [twelfs], or inflectional suffixes can be omitted, like "cards" (/kɑːdz/) becoming [kɑːrdɪz] or [kɑːrd].

5.2 Consonant Phonetic Mispronunciations Made by Students with different English Proficiency Levels

The second study attempted to evaluate the association between students' levels of English ability and the frequency of inaccurate consonant pronunciations. The authors conducted a comparison of the consonant pronunciation errors produced by students with intermediate English proficiency (I. learners) against those made by lower-intermediate level students (L.I. learners) to study this issue.

You can see the breakdown of how many times each of the ten challenging consonants was mispronounced in the table below. Table data shows that compared to intermediate-level students, lower-intermediate students made more or equal percentages of pronunciation mistakes when it came to the ten most difficult consonant sounds. Students at the intermediate level rarely made more mistakes than average when pronouncing the phoneme /v/ in the last position of a word compared to when

pronouncing the phoneme /g/ in the first position. Some students in this class may have developed peculiar speech patterns, which could explain this. The disparity in the error rates of the two groups when they attempted to pronounce the ten sounds in each of the three locations is also noteworthy. As indicated before, the initial position of words typically has a larger difference in the mistakes produced by both groups than the medial and final positions.

Table 4 shows the percentage of difficult consonant sounds mispronounced by intermediate (I.) and lower-level (L.I.) speakers.

Challenging consonant	**Initial**		**Medial**		**Final**		**All positions**	
	L.-I. S. %	I. S. %	L.I. S. %	I. S. %	L-I. S. %	I. S. %	L-I. S. %	I. S. %
/ʒ/	--	--	84.6	43.6	77	60	76.76	59.40
/ŋ/	--	--	--	--	79	66	68	76
/p/	59	49	80	60	79	75	68.6	55.9
/ɹ/	68	40	69	63	78	81	75.50	70.55
/ð/	22	9	20	13	40	0	30.40	8
/ʧ/	35	29	44	8	20	68	33	41.44
/v/	10	21	20	5	22	6	20.50	9.45
/θ/	35	12	1	6	0	5	15.40	7
/g/	41	18	19	7	29	0	30	5
/l/	31	30	30	6	10	14	22.35	15

Students at the lower-intermediate level were more likely to make mistakes than those at the intermediate level while pronouncing the regular morphemes -s and -ed. Two groups were created by this class of consonant sounds; Table 5 displays the percentage of errors for each category. According to the data in the table, students at the lower-intermediate level had higher or equal percentages of mistakes in the other morpheme articulation choices. The pupils at the intermediate level were the sole ones who did not follow this rule.For example, /ɪd/, /s/, /z/, /t/, and /d/ are all part of this. There is a little difference in the percentage of times this consonant type is mispronounced between the two groups, which is worth noting.

Table 5. Percentage of pronunciation errors in the morphemes -s and -ed among lower-level and intermediate learners

	-s			**-ed**		
	/s/ or /z/	**/ɪz/**	**Total mistakes**	**/t/ or /d/**	**/ɪd/**	**Total mistakes**
L.I. s.	14 %	16%	15%	65%	8%	36.5%
I. s.	8.5	22.25%	15.4%	60%	9%	34.5%

The inaccuracies that were made by both groups in the pronunciation of the beginning and ending consonant formations are discussed here. Table data shows that students at lower intermediate levels made more mistakes than students at higher levels when pronouncing all five kinds of consonant clusters. This was in comparison to their peers who were at intermediate levels that were comparable to their own.

. The table presents two significant challenges to look at. When it came to the pronunciation of clusters of three and four consonants, both groups initially had a larger frequency of errors compared to clusters of two consonants. Furthermore, they had a more difficult time with concluding clusters than they did with initial clusters. While the difference in the percentage frequency of errors between the two groups is substantially smaller in the initial clusters of words, it is significantly larger in the end clusters of words.

Table 6. Initial and ending positions of consonant cluster pronunciation errors among lower-level and intermediate learners.

	Initial Cluster			**Final Cluster**			
	CC	**CCC**	**Total mistakes**	**CC**	**CCC**	**CCCC**	**Total mistakes**
L.l.s.	1.75%	24 %	12.87%	14.00%	63.50%	89 %	55.50%
l.s.	3%	19.57	13.38	7%	29%	76.60%	44.18%

6. Discussion and Conclusion

This study's findings shed light on Iraqi EFL students' difficulties pronouncing English consonant sounds and clusters. Research shows that people often mispronounce sounds like /ʒ/, /ŋ/, /p/, /ɹ/, and /ʧ/, as well as past morphemes /t/ and /d/ and consonant clusters with four and three consonants. The difficulty of pronouncing words is greatly affected by where the phonemes and clusters of consonants are located within them. Errors in pronunciation were more likely to occur with certain sounds, including /p/ and /œ/ in medial and final positions, /ʒ/, /ʃ/, and /l/ in final position, /ɲ/, /v/, and /Ř/ at the beginning of words, and in final consonant clusters.

The statistics imply that more consonants at the beginning and end of a word create pronunciation problems than medial consonants. The study found that English proficiency greatly affected consonant pronunciation errors. Intermediate students had fewer pronunciation errors than lower intermediate students. harmonic clusters and noises. At the beginning of words, there is a larger disparity in the percentage of errors made by the two groups while articulating the ten hard sounds compared to the middle and end.

Consonant sounds and clusters are challenging for Arab and Iraqi English students, according to this study, which supports the CAH. However, phoneme difficulty and order matter. Different studies rate sound difficulty differently. Arabic lacks consonant clusters, hence many English syllables may be difficult for Arab students to learn. These consistent findings suggest that the speakers' first language's phonological system caused most of their pronunciation problems. Students also struggled with rare Arabic consonant clusters. Due to phonetic differences between the languages. This study found that L1's considerable influence inversely corresponds with language competency, the second pronunciation barrier. The situation is suggested by Ammar and Alhumaid (2009).. Krashen's (1985) Input Hypothesis supports the need of proper learning events in acquisition.

Third, lack of consciousness raising contributes to pronunciation difficulties. Misarticulations may be caused by participants' -s and -ed pronunciation. If offered pronunciation-focused activities, the students may have avoided their mistakes. The pronunciation of these two morphemes can be learned with guidelines.

Based on this research and other studies, Arabic students, especially Iraqis, must get English consonant articulation training. Word placement and articulation proficiency affect the difficulty of consonant phonemes and clusters, thus trainers should be aware of this. English and Arabic have different phonological systems, which might cause articulation problems for children. Computer-aided articulation training (CAAT) is essential for learning English as a second or foreign language. A comfortable and stress-free learning environment, rich educational resources, tailored practice, and fast feedback are among these benefits. Additionally, children learn pronunciation traits related with

Additional research is needed to confirm current and earlier findings on Arab students' English consonant pronunciation difficulties. This study evaluated speakers' word articulation using word lists, but future research may use sentence reading and spontaneous speech. Future research may also examine the challenges Iraqi male university students, pre-university students, and Arabs from varied backgrounds confront while pronouncing English consonants. This would help determine how gender, linguistic input, and age affect second language consonant pronunciation. The link between consonant perception and articulation needs further study. Finally, it will be intriguing to study. The effectiveness of varied training methods to improve Arab learners' English consonant pronunciation**.**

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