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The Influence of a Mother Tongue on English Pronunciation While Acquiring English as a Second Language

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Abstract

This study aims to investigate the role of the mother tongue on English pronunciation in the acquisition of a second language. Many people face issues while acquiring English as a second language. These issues can be divided into two main categories: the impact of a mother tongue on second language and ineffective teaching approaches. This study focuses on the first category which means the influence of the native language of the learner on their acquisition of the target language. The researcher used a mixed method in the present study and asked the participants to record their voices while pronouncing certain vowels and consonants. After that, the data were collected and analyzed from audio recordings based on the International Phonetic Alphabet system. There are 40 participants including 20 females and 20 males from four nationalities: Saudi, Mexican, Turkish, Filipino. The results showed that the findings of the study answered the research questions about the influence of the mother tongue on learners' pronunciation while acquiring English as a second language. It showed that participants faced problems because of the influence of their mother tongue. It also answered the second research question about the difference between L2 learners' pronunciation based on their gender. In general, there was a difference between genders when pronouncing English by learners from different countries, where male participants had higher numbers of mispronunciations than female participants.

Keywords: Mother tongue, English Pronunciation, L2.

1. Introduction

A learner may find learning a second language to be extremely difficult and stressful. Many people face difficulties while acquiring English as a second language. These difficulties can be divided into two main categories: mother tongue and ineffective teaching approaches. This study focuses on the first category which means the influence of the native language of the learner on their acquisition of the target language. Most of the mistakes that occur in pronunciation are made due to the mother tongue effect in the sound system of English. The mother tongue interference may affect English learners' speaking skills. For

example, Saudi students who learn English as a second language face issues in learning English pronunciation such as /v/ sound. They may pronounce "video" as "fideo" when they pronounce the /v/ as the /f/ sound. This is the result of their language since Arabic does not have /v/ sound. This paper aims to explore the influence of one's mother tongue during the learning process of pronunciation in English. The research is based on a mixed method. Quantitative data are analyzed statistically. And quantitative data analyzed thematically.

1.1. Statement of the Problem

I have noticed that a lot of people struggle with learning English as a second language, and one of the most common errors they make is mispronouncing words, which challenges their ability to learn a language. One example of this would be when Saudi students mispronounce the /p/ sound in the word “Pepsi”. They say “bebsi” instead of “pepsi”. This is the result of their language since Arabic does not have the /p/ sound. Lastly, this will influence their learning process especially if their goal is to become a fluent English speaker.

1.2. Purpose of the Study

The main purpose of this study is to investigate the effect of the mother tongue on English pronunciation while acquiring English as a second language.

1.3. Research Questions

This study answers the following questions:

- How does the mother tongue influence learners’ pronunciation while acquiring English as a second language?
- Is there a difference between L2 learners’ pronunciation based on their gender?

1.4. Previous Studies

The first study was conducted by Aghadiuno (2021). It aimed to show the influence of the mother tongue on Chinese learners of English. The study took place in China. The study used a case study method. The instrument that was used in this study was an interview. The participants were Chinese learners of English aged 3 to 10. The study's findings were that Chinese and English both have aspirated stops and affricates but the Chinese aspirated stops are strongly aspirated while the English aspirated stops can be said to be so only on a word-initial position. Chinese English learners tended to unconsciously pronounce the voiceless stops as strongly aspirated in every situation they find such stops, except in a situation where it had been drilled and corrected. Based on the findings, the researcher promoted the use of standard English in schools: by holding seminars for Chinese English teachers; allocating more time for oral English instruction; implementing a reward-punishment system; discouraging students from speaking in their native language in class; and encouraging teachers to use drilling, particularly in the English phonetic classes.

Moreover, Patrick et al, (2013) conducted a study that explored the interference of mother tongue on the English pronunciation of senior primary school pupils in Nigeria. Only four languages from 521 were studied; these were Yoruba, Hausa, Igbo and Tiv. According to the research result, English language teachers should be committed and patient with these kids as they build foundational speaking skills. In order to address mistakes that were carried over from mother tongue to the classroom, teachers should try to create kid-friendly activities that meet the demands of the local ethnic community. Mother tongue has been identified as a way

for the acquisition of L2 in Nigeria, which for the majority of senior primary school pupils it is English language. Therefore, its importance should not be underestimated.

The third study was conducted by Shanmugasundaram and Jebakumar (2022). It was a case study that investigated the effect of college students' mother tongue on pronouncing English words, and how they were interfered by the mother tongue. The participants consisted of fifteen English students who spoke Tamil language on a regular basis. Tamil is the most often used local language at the college level in Thoothukudi, Tenkasi, and Tirunelveli, India. This study focused on using a qualitative approach. Assessments of pronunciation and recorded interviews were the main techniques used to gather data. A recognized pronunciation test, an interview guide, and a document analysis were among the resources. Since English and Tamil share some phonemic sounds, the result showed that the interference was advantageous and suggested that this interference was unlikely to change the meanings of English words.

The fourth study was investigated by Noviyenty & Putri (2021, March), who focused on mother tongue interference and its effect on students' English speaking skills, especially in pronouncing words intrinsically. This study used a descriptive method in the field of English pronunciation elaborated in a qualitative way. Recorded interviews and pronunciation testing were the main techniques of collecting data. An interview guide, validated pronunciation test, and document analysis were the instruments. There were 16 participants who used Rejang language in daily communication, and they were incorporated as the subjects of this study. The results showed that students' pronunciation of English, including consonants, vowels, and diphthongs, was affected by Rejang language, which is the mother tongue of the majority of students at IAIN Curup campus. In summary, the interference was beneficial since the phonemic sounds of the Rejang language is similar to English system and that is why the meaning of English words did not change because of that interference.

The last study was investigated by Ochagu (2022), who focused on the influence of the mother tongue on English Language usage. 120 Ikom learners of English were selected from three secondary schools in Ikom Local, Nigeria where Ikom is their native language. In addition to (phonetic) articulation tests, data were collected using tape recorders and digital recorders. The study used descriptive and quantitative approaches in the data analysis. The instruments used were relevant textbooks, magazines, online and offline libraries, and the internet served as the data sources. The findings revealed that the mother tongue of Ikom influenced learners of English negatively their spoken English was significantly influenced: their articulation of English consonants, vowels, consonant clusters, and suprasegmentals; stress and intonation.

The current study difference from the previous studies in terms of setting, participants, age and gender. The purpose of this current study is to investigate the influence of the mother tongue on English pronunciation while acquiring English as a Second Language. Previous research was conducted in Nigeria, China, and India while this study is conducted in Yanbu, Saudi Arabia. In terms of the participants, in the previous three studies, the respondents were not identified, and in the first study, the participants were between the ages of 3 and 10. However, this study's participants are 20 females and 20 males from various nations, varying in age and cultural background. They are 10 Saudi, 10 Mexican, 10 Turkish and 10 Philippine.

2. Methodology

This section of the research discusses the type of research and the research tool. It also describes the participants who took part in this study. It also explains how the data were collected.

2.1. Type of the Research

This research is a mixed method, and the researcher uses voice recordings to collect data. Then, the researcher uses a data analyzing rubric based on the IPA system, to analyze and evaluate data.

2.2. Research Tool

Data Analysis Rubric The data was collected using recordings and then evaluated using a rubric. The rubric contains 5 main categories: carrier sentences, tested words, IPA transcription, and how the words are pronounced by male and female participants. The data collected from the participants are analyzed and compared to the correct IPA transcription.

2.3. Participants of the Research

The participants of this research included 20 females and 20 males from different nationalities, which are Saudi, Mexican, Turkish, and Filipino. Their ages are between 20 – 50 years old and they have different cultures. The researcher chose equal numbers of participants from each nationality to have balanced data.

2.4. Data Collection Procedure

The researcher takes the ethical approval from all participants. The collection of the data takes over one month. The researcher uses WhatsApp to collect data. The researcher designed two types of phonetic tests, one for consonants and one for vowels and diphthongs. The tests are given to all participants. The phonetic test of consonants is given using carries sentences. The phonetic test of vowels and diphthongs is given using single words. The researcher asks all participants to record their voices. After that, the researcher analyses the audio recordings with the IPA system. Finally, the results are discussed and presented in tables.

3. Results and Discussion

This section of the research presents the data analysis rubric to see the result of the research questions: How does the mother tongue influence learners' pronunciation while acquiring English as a second language? and Is there a difference between L2 learners' pronunciation based on their gender?

Table 1 *Response frequencies of Saudi participants data analysis when they pronounce consonants*

#	Carriers Sentences	Word	IPA Transcription	Pronounced as male	Pronounced as Female
1	My parents were in Portugal last week.	Portugal	/pɔrtəgəɬ/	/bɔrtəgl/ /bɔrtəgæl/ /bɔrtəgæl/ /pɔrtəgæl/ /pɔrtəgəɬ/	/bɔrtəgəɬ/ /bɔrtəgəɬ/ /bɔrtəqæl/ /bɔrtəgəɬ/ /bɔrtəqæl/
2	I saw a giraffe	Giraffe	/dʒræf/	/dʒeræf/ /dʒiræf/ /gərræf/ /qiræf/ /qiræf/	/gɘæf/ / dʒræf/ /greɪf/ /dʒiræf/ /gɘrf/
3	My favourite color is silver.	Silver	/sɪɬvr/	/sɪɬfr/ /sɪɬver/ /sɪɬfr/ /sɪɬfr/ /sɪɬvr/	/sɪɬvr/ /sɪɬfr/ /sɪɬvr/ /sɪɬfr/ /sɪɬvr/
4	What is the meaning of furniture?	Furniture	/fɜːrnɪʧər/	/fɜːrnɪtər/ /fɜːnɪʧər/ /fərnɪʧər/ /fɜːrnɪʃər/ /fɔːrnɪtər/	/fɜːrnɪʧər/ /fɜːrnɪʃərs/ /fɜːrnɪʧər/ /fɜːrnɪʧər/ /fɜːrnɪʧər/
5	What time is it? It's three o'clock.	Three	/θri/	/θri/ /θri/ /θri/ /θri/ /θri/	/θri/ /θri/ /θri/ /ðri/ /tri/

The table above presents the results of Saudi speakers when they pronounced the words containing the following sounds, /p/, /dʒ/, /v/, /tʃ/ and /θ/. I chose these sounds specifically because Arabic sounds do not have /p/, /dʒ/, /v/, and /tʃ/ sounds. All mispronounced sounds are written in red color.

The first word was " Portugal/pɔrtəgəɬ ", which showed that all female participants and 3 out of 5 male participants mispronounced the voiceless bilabial stop /p/ sound as voiced bilabial stop /b/ sound. The mispronunciation of /p/ sound occurred frequently among Arabic speakers because Arabic does not have /p/ sound. The second word was " Giraffe/dʒræfit ", which showed that 3 out of 5 female participants and 3 out of 5 male participants mispronounced the post-alveolar affricate /dʒ/ sound as voiced velar stop /g/ sound. The third word was " Silver /sɪɬvr ", which showed that 2 out of 5 female participants and 3 out of 5 males participants mispronounced the voiced labio-dental fricative /v/ sound as voiceless labio-dental fricative /f/ sound. The fourth word was " furniture/fɜːrnɪʧər ", which showed that 1 out of 5 female participants and 1 out of 5 male participants mispronounced the voiceless post-alveolar affricate /ʧ/ sound as voiceless post-alveolar fricative /ʃ/ sound. Also, 2 out of 5 male participants mispronounced the voiceless post-alveolar affricate /ʧ/ sound as /t/ fifth word in recorded was " Three/θri ", which showed that 1 out of 5 female participants mispronounced the voiceless lingua-dental fricative /θ/ sound by using voiced lingua-dental fricative /ð/ sound. Also, another female participant mispronounced the voiceless lingua-dental fricative /θ/ sound by using the voiceless alveolar stop /t/ sound.

Table 2 *Response frequencies of Saudi participants data analysis when they pronounce vowels and diphthongs*

#	Word	IPA Transcription	Pronounced as male	Pronounced as Female
Vowels				
1	Please	/plɨz/	/plɨz/ /blɨ:z/ /blɨ:z/ /pli:z/ /qi:z/	/plɨz/ /blɨ:z/ /plɨ:z/ /plɨ:s/ /blɛɪs/
2	Comfortable	/kəmfɜ·təbəl/	/kəmfɜ·təbəl/ /kəmfɔrtəbəl/ /kəmfɔrtəbəl/ /kəmfɔrteɪbəl/ /kəmfɔrtəbəl/	/kəmfɜ·təbəl/ /kəmfɔrtəbəl/ /kəmfɜ·təbəl/ /kəmfɔrtəbɔl/ /kəmfɔrtəbɔl/
3	Foot	/fʊt/	/fʊt/ /fu:t/ /fu:t/ /fu:t/ /fu:t/	/fu:t/ /fʊt/ /fu:t/ /fʊt/ /fʊt/
Diphthongs				
4	Coin	/kɔɪn/	/kɔɪn/ /kɔɪn/ /kɔɪn/ /ku:n/ /kɔɪn/	/kɔɪn/ /kæn/ /kɔɪn/ /kɔɪn/ /kwɪn/
5	Fake	/feɪk/	/feɪk/ /feɪk/ /feɪk/ /feɪk/ /fek/	/feɪk/ /fek/ /feɪk/ /feɪk/ /feɪk/

The table above presents the results of Saudi speakers when they pronounced the words that I focused on to test the following vowels and diphthongs, which are /i/, /ɜ·/, /ʊ/, /ɔɪ/ and /eɪ/. I chose these vowels and diphthongs specifically because Arabic vowels and diphthongs do not have some of these /i/, /ɜ·/, /ʊ/, /ɔɪ/ and /eɪ/ vowels and diphthongs. All mispronounced sounds are written in red color.

The first word was " Please/plɨz ", which showed that 3 out of 5 female participants mispronounced the front close short /i/ vowel by using the central close long /i:/ vowel. Also, 1 of the female participants mispronounced the front close /i/short vowel by using /eɪ/ diphthong. However, 4 out of 5 male participants mispronounced the front close short /i/ vowel by using the central close long /i:/ vowel. The second word was " Comfortable/kəmfɜ·təbəl ", which showed that 3 out of 5 female participants and 4 out of 5 male participants mispronounced the central open-mid /ɜ·/ vowel by using back open-mid /ɔ/ vowel. The third word was " foot/fʊt ", which showed that 2 out of 5 female participants and 4 out of 5 male participants mispronounced the back close /ʊ/ vowel by using central close /u:/ vowel. The fourth word was " Coin/kɔɪn ", which showed that 1 of the female participants mispronounced the back open-mid /ɔɪ/ diphthong by using the /wɪ/ sound. Also, another female participant mispronounced the back open-mid /ɔɪ/ diphthong by using the front open-mid /æ/ vowel, while 1 of the male participants mispronounced the back open-mid /ɔɪ/ diphthong by using central close /u:/ vowel. The fourth word was " Fake/feɪk ", which showed that 1 out of 5 male participants and 1 of female participants mispronounced the front open-mid /eɪ/ diphthong by using the /e/ sound.

Table 3 *Response frequencies of Turkish participants data analysis when they pronounce consonants*

#	Carriers Sentences	Word	IPA Transcription	Pronounced as male	Pronounced as Female
1	My parents were in Indonesia last week.	Indonesia	/ɪndoʊnɪʒə/	/ɪndoʊnizə/ /ɪndoʊnizə/ /ɪndoʊnizə/ /ɪndɤxxnizə/ /ɪndʊnizə/	/ɪndoʊnizə/ /ɪndoʊniʒə/ /ɪndoʊniʒə/ /ɪndoʊnizə/ /ɪndoʊniʃə/
2	I saw a Panther	Panther	/pænθr/	/pænθr/ /pænθr/ /pænθr/ /pænθr/ /pænθr/	/pænθʊr/ /pænθr/ /pænθr/ /pænθr/ /pænθr/
3	My favourite color is violet.	Violet	/vaɪəɬɪt/	/vaɪəɬɪt/ /vaɪəɬət/ /jaɪəɬət/ /vaɪəɬʊt/ /vɪəɬɪt/	/vaɪəɬʊt/ / vaɪəɬɪt/ /jaɪəɬʊt/ /vilʊt/ /vaɪəɬʊt/
4	What is the meaning of these?	These	/ðiz/	/tis/ /di:s/ /di:s/ /tis/ /ti:z/	/ðɪs/ /ðɪs/ /ðiz/ /tiz/ /ðiz/
5	What time is it? It's one o'clock.	One	/wən/	/wən/ /wən/ /wən/ /vən/ /wən/	/vən/ /wən/ /vən/ /wən/ /wən/

The table above presents the results of Turkish speakers when they pronounced the words containing the following sounds, which are /dʒ/, /θ/, /ð/, /v/, and /w/. All mispronounced sounds are written in red color.

The first word was ‘’Indonesia/ɪndoʊniʒə”, which showed that all males mispronounced the voiced post-alveolar affricate /dʒ/ sound as the voiced alveolar fricative /z/ sound, while 2 out of 5 female participants mispronounced the voiced post-alveolar affricate /dʒ/ sound as the voiced alveolar fricative /z/ sound. Also, 1 of female participants mispronounced the voiced post-alveolar affricate /dʒ/ sound as the voiceless post-alveolar fricative /ʃ/ sound. The second word was " Panther/pænθr ", which showed that all female and male participants mispronounced the voiceless dental fricative /θ/ sound as the voiceless alveolar stop /t/ sound. The third word was " violet/vaɪəɬɪt ", which showed that 1 out of 5 male participants and 1 out of 5 female participants mispronounced the voiced labio-dental /v/ sound as the voiceless palatal glide /j/ sound. The fourth word in the recording was " These/ðiz ", which showed that 1 out of 5 female participants and 2 out of 5 male participants mispronounced the voiced dental fricative /ð/ sound as the voiceless alveolar stop /t/ sound. Also, another 2 out of 5 male participants mispronounced the voiced lingua-dental /ð/ sound as the voiced alveolar stop /d/ sound. The fifth word was " one/wən ", which showed that 2 out of 5 female participants and 1 out of 5 male participants mispronounced the voiceless velar glide /w/ sound as the voiced labio-dental /v/ sound.

Table 4 *Response frequencies on data analysis for Turkish Participants when they pronounced vowels and diphthongs*

#	Word	IPA Transcription	Pronounced as male	Pronounced as Female
Vowels				
1	Warm	/wɔrm/	/værm/ /wɔrm/ /wɔrm/ /wærm/ /værm/	/wærm/ /wɔrm/ /værm/ /værm/ /wɔrm/
2	Near	/nɪ:r/	/nɪ:r/ /nɪ:r/ /nɪ:r/ /nɪ:r/ /nɪr/	/nɪ:r/ /nɪ:r/ /nɪ:r/ /nɪ:r/ /nɪ:r/
3	Tick	/tɪk/	/ti:k/ /ti:k/ /tɪk/ /tɪk/ /tɪk/	/fu:t/ /fʊt/ /fu:t/ /fʊt/ /fʊt/
Diphthongs				
4	Brown	/braʊn/	/braʊn/ /braʊn/ /broʊn/ /broʊn/ /broʊn/	/broʊn/ /braʊn/ /braʊn/ /boʊn/ /braʊn/
5	Goat	/goʊt/	/gət/ /gət/ /goʊt/ /gət/ /gəʊt/	/gɑt/ /goʊt/ /goʊt/ /gɑt/ /gʊt/

The table above presents the results of Turkish speakers when they pronounced the words containing the following vowels and diphthongs /ɔ/, /ɪ:/, /ɪ/, /aʊ/, and /oʊ/.

The first word was " warm/wɔrm ", which showed that 3 out of 5 male participants and 3 out of 5 female participants mispronounced the back open-mid short /ɔ/ vowel by using the front open-mid long /æ/ vowel. The second word was " near/nɪɹ ", which showed that all participants pronounced it correctly except 1 male participant who mispronounced the front close long /i:/ vowel by using the central close short /ɪ/ vowel. The third word was " tick/tɪk ", which showed that 2 of female participants and 2 of male participants mispronounced the front close short /ɪ/ by using the central close long /i:/ vowel. The fourth word was " brown/braʊn ", which showed that 2 out of 5 female participants and 3 out of 5 male participants mispronounced the central open /aʊ/ diphthong by using /oʊ/ sound. Looking into the English mispronunciation of Turkish participants after analyzing recordings pronunciation of English vowels, diphthongs, and consonants, I found a few issues in Turkish participants because of the influence of their mother tongue such as /dʒ/ sound they mispronounced it to /z/ sound. I noticed that all the Turkish participants pronounced the /t/ sound in “what time” as a /ط/ sound. Also, some of them mispronounced the /w/ sound in the “warm” word using the /v/ sound.

Table 5 *Response frequencies of Mexican participants data analysis when they pronounce* consonants

#	Carriers Sentences	Word	IPA Transcription	Pronounced as male	Pronounced as Female
1	My parents were in Chicago last week.	Chicago	/ʃəkɑgoʊ/	/tʃəkɑgoʊ/ /tʃəkɑgoʊ/ /tʃəkɑgoʊ/ /tʃəkɑgoʊ/ /ʃəkɑgoʊ/	/tʃɪnə/ /tʃəkɑgoʊ/ /ʃəkɑgoʊ/ /ʃəkɑgoʊ/ /ʃəkɑgoʊ/
2	I saw a dog.	Dog	/dɔg/	/dɔk/ /dɔ:g/ /dəg/ /dɔg/ /dɔg/	/dɔk/ /dɔg/ /dɔ:g/ /dɔ:g/ /dɔ:g/
3	My favourite color is yellow.	Yellow	/jɛłoʊ/	/dʒɛłoʊ/ /jɛłoʊ/ /jɛłoʊ/ /jɛłoʊ/ /dʒɛłoʊ/	/dʒɛłoʊ/ /jɛłoʊ/ /jɛłoʊ/ /jɛłoʊ/ /jɛłoʊ/
4	What is the meaning of closet?	Closet	/klɑzət/	/klɑsət/ /klɑsət/ /klɑzət/ /klɑsət/ /klɑzət/	/klɑzət/ /klɑzət/ /klɑzət/ /klɑsət/ /klɑzət/
5	What time is it? It's twelve o'clock.	Twelve	/twɛłv/	/twɛłv/ /twɛłv/ /twɛłv/ /twɛłv/ /twɛłv/	/twɛł./ /twɛłv/ /twɛłv/ /twɛłv/ /twɛłv/

The table above presents the results of Mexican speakers when they pronounced the words containing the following sounds which are, /ʃ/, /g/, /j/, /z/, and /v/. All mispronounced sounds are written in red color.

The first word was " Chicago/ʃəkɑgoʊ ", which showed that 2 out of 5 female participants and 4 out of 5 male participants mispronounced the voiceless post-alveolar fricative /ʃ/ sound as the voiceless post-alveolar affricative /tʃ/ sound. The second word was " Dog/dɔg ", which showed that 3 out of 5 female participants and 1 out of 5 male participants mispronounced the voiced velar stop /g/ sound as the voiceless velar stop /k/ sound. The third word was " yellow/jɛłoʊ ", which showed that 1 out of 5 female participants and 1 out of 5 male participants mispronounced the voiceless palatal glide /j/ sound as the voiced post-alveolar affricate /dʒ/ sound. The fourth word was " closet/klɑzət ", which showed that 1 out of 5 female participants and 3 out of 5 male participants mispronounced the voiced alveolar fricative /z/ sound as voiceless alveolar fricative /s/ sound. The fifth word was " Twelve/twɛłv ", which showed that 1 out of 5 female participants mispronounced the voiced labio-dental /v/ sound by deleting it, while all male participants pronounced it correctly.

Table 6 *Response frequencies of Mexican participants data analysis when they pronounce vowels and diphthongs*

#	Word	IPA Transcription	Pronounced as male	Pronounced as Female
Vowels				
1	Specially	/spɛʃəɬi/	/əspɛʃəli/ /spɛʃiɬi/ /əspɛʃəli/ /əspɛʃiɬi/ /əspɛʃəli/	/spɛʃəli/ /əspɛsiɬɪti/ /spɛʃəli/ /spɛʃəli/ /əspɛʃəli/
2	Street	/stɹri:t/	/stri:t/ /əstri:t/ /stri:t/ /stri:t/ /əstri:t/	/stri:t/ /strɔɪt/ /stri:t/ /stri:t/ /əstri:t/
3	Choose	/tʃuz/	/ʃuz/ /tʃu:z/ /tʃuz/ /tʃuz/ /ʃu:z/	/tʃuz/ /tʃuz/ /tʃu:z/ /dʒuz/ /tʃuz/
Diphthongs				
4	Favourite	/feɪvɜ-rɪt/	/feɪvɜ-rɪt/ /fɑvɜ-rɪt/ /feɪvɜ-rɪt/ /feɪvɜ-rɪt/ /fɑvɜ-rɪt/	/fɑvɜ-rt/ /feɪvɜ-rɪt/ /feɪvɜ-rɪt/ /feɪvɜ-rɪt/ /feɪvɜ-rɪt/
5	Drought	/drɑʊt/	/drʊnt/ /drʊnt/ /drɑʊt/ /drɑʊt/ /drʊnt/	/drʊt/ /drɑʊt/ /drɑʊt/ /drɑʊt/ /drʊnt/

The table above presents the results of Mexican speakers when they pronounced the words containing the following vowels and diphthongs /ə/, / i:/, /u/, /eɪ/, and /ɑʊ/.

The first word was " Specially/spɛʃəɬi ", which showed that 1 out of 5 female participants and 2 out of 5 male participants mispronounced the central close-mid /ə/ vowel as central close /i/ vowel. The second word was " Street/stɹit ", which showed that 1 out of 5 female participants mispronounced the front close /i:/ vowel as back open-mid /ɔɪ/ diphthongs, while all male participants pronounced /i:/ vowel correctly. The third word was " Choose/tʃuz ", which showed that 1 out of 5 female participants and 2 out of 5 male participants mispronounced the back close short /u/ vowel as central close long /u:/ vowel. The fourth word was " favorite/feɪvɜ-rɪt ", which showed that 1 out of 5 female participants and 2 out of 5 male participants mispronounced the front open-mid /eɪ/ diphthong as front open /ɑ/ vowel. The last word in the recorded was " Drought/drɑʊt ", which showed that 2 out of 3 female participants and 3 out of 5 male participants mispronounced the central open /ɑʊ/ diphthong as back close /ʊ/ vowel.

Table 7 *Response frequencies of Filipino participants data analysis when they pronounce* vowels

#	Carriers Sentences	Word	IPA Transcription	Pronounced as male	Pronounced as Female
1	My parents were in Japan last week.	Japan	/dʒəpæn/	/dʒəpæn/ /dʒəbæn/ /dʒəpæn/ /dʒəbæn/ /dʒəbæn/	/dʒəpən/ /dʒəbæn/ /dʒəbæn/ /dʒəbæn/ /dʒəbæn/
2	I saw a bear.	Bear	/bɛɹ/	/vi:r/ /vɛr/ /bi:r/ /bɛɹ/ /vɛr/	/bɛr/ /vɛr/ /bɛr/ /vɛr/ /vɛr/
3	My favourite color is beige.	Beige	/beɪdʒ/	/beɪz/ /beɪdʒ/ /beɪz/ /beɪz/ /beɪz/	/bɪdʒ/ /beɪz/ /bɪdʒ/ /beɪdʒ/ /beɪz/
4	What is the meaning of disk?	Disk	/dɪsk/	/dɪsk/ /dɪ:z./ /dɪs./ /dɪs./ /dɪs./	/ðiz/ /dɪs./ /dɪsk/ /dɪsk/ /dɪs./
5	What time is it? It's twelve o'clock.	Twelve	/twɛłv/	/twɛłv/ /twɛłv/ /twɛłv/ /twɛłv/ /twɛłv/	/twɛł./ /təɛłv/ /twɛłv/ /twɛłv/ /twɛłv/

The table above presents the results of Filipino speakers when they pronounced the words consisting of the following sounds /p/, /d/, /b/ /dʒ/, /k/, and /v/. All mispronounced sounds, vowels and diphthongs are written in red color.

The first word was " Japan/dʒəpæn ", which showed that 4 out of 5 female participants and 3 out of 5 male participants mispronounced the voiceless bilabial stop /p/ sound as the voiced bilabial stop /b/ sound. The second word was " bear/bɛr ", which showed that 3 out of 5 female participants and 3 out of 5 male participants mispronounced the voiced bilabial stop /b/ sound as voiced labio-dental /v/ sound. The third word was " Beige/beɪdʒ ", which showed that 2 out of 5 female participants and 4 out of 5 male participants mispronounced the voiced post-alveolar affricative /dʒ/ sound as voiced alveolar fricative /z/ sound. The fourth word was " disk/dɪsk ", which showed that 2 out of 5 female participants and 5 out of 5 male participants did not pronounce the voiceless velar stop /k/ sound. The fifth word was " Twelve/twɛłv ", which showed that 1 out of 5 female participants did not pronounce the voiced labio-dental /v/ sound, while all male participants pronounced the word correctly.

Table 8 *Response frequencies of Filipino participants data analysis when they pronounce vowels and diphthongs*

#	Word	IPA Transcription	Pronounced as male	Pronounced as Female
Vowels				
1	Bird	/bɝd/	/bɝd/ /bɝd/ /bɝd/ /bɝd/ /bɝd/	/bɝd/ /bɝd/ /bɝd/ /bɝd/ /bɝd/
2	Foot	/fʊt/	/fu:t/ /fut/ /fʊt/ /fu:t/ /fu:t/	/fʊt/ /fu:t/ /fʊt/ /fu:t/ /fʊt/
3	Boy	/bɔɪ/	/bɔɪ/ /bɔɪ/ /bɔɪ/ /bɔɪ/ /bɔɪ/	/bɔɪ/ /bɔɪ/ /bɔɪ/ /bɔɪ/ /bɔɪ/
Diphthongs				
4	Gray	/ɡreɪ/	/greɪ/ /greɪ/ /grɪ:/ /grɪ/ /greɪ/	/grɪ/ /greɪ/ /greɪ/ /greɪ/ /gei//
5	Join	/draʊt/	/dʒɔɪn/ /dʒɔɪn/ /dʒɔɪn/ /dʒɔɪn/ /dʒɔɪn/	/dʒɔɪn/ /dʒɔɪn/ /dʒɔɪn/ /dʒɔɪn/ /dʒɔɪn/

The table above presents the results of Filipino speakers when they pronounced the words that containing the following vowels and diphthongs /ɝ/, /ʊ/, /ɔɪ/, /eɪ/, and /ɔɪ/.

The first word was " bird/bɝrd ", which showed that all male and female participants pronounced the word correctly. The second word was " foot/fʊt ", which showed that 2 out of 5 female participants and 3 out of 5 male participants mispronounced the back close short /ʊ/ vowel as central close long /u:/ vowel. Also, another male participant mispronounced the back close short /ʊ/ vowel as the back close short /u/ vowel. The third word was "boy/bɔɪ", which showed that all male and female participants pronounced the word correctly. The fourth word was "Gray/gɹeɪ", which showed that 1 out of 5 female participants and 1 out of 5 male participants mispronounced the front open-mid /eɪ/ diphthong as central close short /ɪ/ vowel. Also, another male participant mispronounced the front open-mid /eɪ/ diphthong as the front close long /i:/ vowel. The fifth word was "join/dʒɔɪn", which showed that all male and female participants pronounced the word correctly.

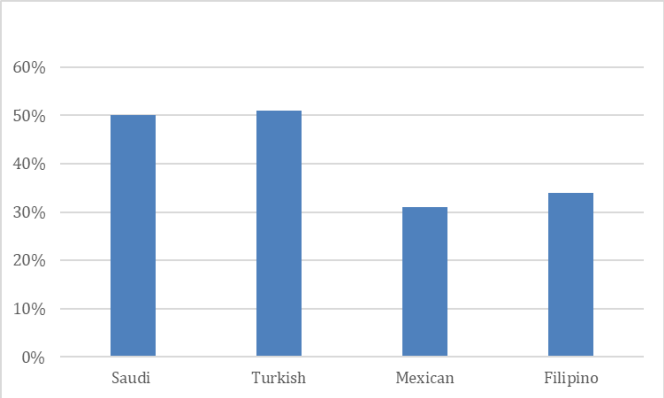
Table 9 *The number of mispronunciations of all sounds across all nationalities*

L1	Consonants			Vowels & diphthongs		
	Male	Female	Total	Male	Female	Total
Saudi	12	13	25	13	12	**25**
Turkish	17	12	**29**	13	9	22
Mexican	10	6	16	9	6	15
Filipino	13	12	25	6	3	9

The table above presents the number of mispronunciations for all nationalities, which showed that Saudi female participants made 12 mistakes in pronouncing vowels and diphthongs, while Saudi male participants committed 13 mistakes in pronouncing vowels and diphthongs. For consonant mispronunciations, Saudi female participants made 13 mistakes, while Saudi male participants mispronounced 12 consonants. (See Tables 1 and 2). For Turkish participants, results showed that Turkish female participants made 9 mistakes in pronouncing vowels and diphthongs, while Turkish male participants committed 13 mistakes in pronouncing vowels and diphthongs. For consonant mispronunciations, Turkish female participants mispronounced 12 consonants, while Turkish male participants made 17 consonants mistakes. (See Tables 3 and 4). For Mexican participants, results showed that Mexican female participants made 6 mistakes in pronouncing vowels and diphthongs, while Mexican male participants made 9 mistakes in pronouncing vowels and diphthongs. For consonant mispronunciations, Mexican female participants mispronounced 6 consonants, while Mexican male participants mispronounced 10 consonants. (See Tables 5 and 6). For Filipino participants, results showed that Filipino female participants committed 3 mistakes in pronouncing vowels and diphthongs, while Filipino male participants committed 6 mistakes in pronouncing vowels and diphthongs. For consonant mispronunciations, Filipino female participants mispronounced 12 consonants, while Filipino male participants mispronounced 13 consonants. (See Tables 7 and 8).

After analysing the results, I found that gender influences English pronunciation where male participants tend to mispronounce more sounds compared to female participants across all L1.

Figure 1 *Percentage of mispronunciation made by all participants*



The figure above presents the percentage of mispronunciations for all nationalities, which shows us that the highest number of mispronunciations were made by Turkish speakers (51%) and Saudi speakers (50%). Most of their mistakes were caused by the influence of their L1s. Filippino speakers committed an average number of (34%). The reason that Mexican speakers made the lowest number of mistakes in pronunciation 3(31%) compared to other L1 speakers is because the Spanish system is similar to the English system.

The results showed that the findings of the study answered the research questions about the influence of the mother tongue on learners' pronunciation while acquiring English as a second language. It showed that participants faced problems because of their mother tongue influence. It also answered the second research question about the difference between L2 learners' pronunciation based on their gender. In general, there was a difference between genders when pronouncing English by learners from different countries, where male participants had higher numbers of mispronunciations than female participants. The results of this research supported the results of the previous studies in literature. It supported the results

of the Chinese study (Aghadiuno, 2021) which showed that the Chinese language as a mother tongue influenced the acquisition of the English language negatively. On the contrary, it did not support the results of the Nigerian study (Ochagu, 2013) and Indian study (Shanmugasundaram and Jebakumar, 2022) that revealed that students learned English (L2) by using their mother tongue. The interference of the mother tongue was advantageous in these studies.

4. Conclusion and Future Work

This study aimed to investigate the influence of the mother tongue on English pronunciation while acquiring English as a Second Language. The research findings showed that many people's mother tongue influenced them, that affects issues like differences in vowels and consonants that affect their L2. This study was applied to speakers of four different native languages. Finding the participants was the most difficult thing because it was hard to find different L1 speakers in Yanbu City. After conducting this research, the researcher recommends increasing the number of participants to achieve more valid results. Another recommendation is expanding the number of vowels and consonants. Lastly, other nationalities can be added to get a deeper view of the relationship between making mistakes and the participants' mother tongue. The research findings show that the mother tongue plays a major role in the pronunciation of the learners when they pronounce words in English.

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