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PEDAGOGY OF NATIONAL AND FOREIGN LANGUAGES

UNDERGRADUATE PROGRAM

RESEARCH REPORT

**“THE INTERFERENCE OF THE SPANISH MOTHER TONGUE ON
ENGLISH PRONUNCIATION IN UNIVERSITY STUDENTS”**

Research report before obtaining the bachelor degree in National and Foreign language

Pedagogy, English Major

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PUJILI - ECUADOR

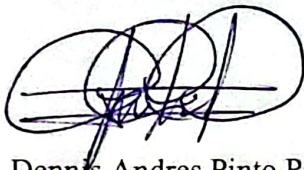
AUGUST - 2024

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Pinto Paucar Dennis Andres, with citizenship card No. 1804460341, Jhon Dennis Rosario Dominguez, with citizenship card No. 1752582278 declare to be authors of this RESEARCH PROJECT: "THE INTERFERENCE OF THE SPANISH MOTHER TONGUE ON ENGLISH PRONUNCIATION IN UNIVERSITY STUDENTS", being PhD. Vicente Rodrigo Tovar Viera., Tutor of this work; and, I expressly exempt the Technical University of Cotopaxi and its legal representatives from possible claims or legal actions.

Furthermore, I certify that the ideas, concepts, procedures and results expressed in this research work are my exclusive responsibility.

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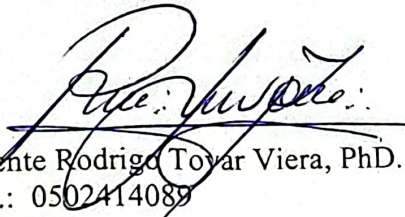
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ENDORSEMENT BY THE RESEARCH PROJECT TUTOR

As Tutor of the Research Project on the title:

“THE INTERFERENCE OF THE SPANISH MOTHER TONGUE ON ENGLISH PRONUNCIATION IN UNIVERSITY STUDENTS”, by Pinto Paucar Dennis Andres; Rosario Dominguez Jhon Dennis, of the Pedagogy of National and Foreign Languages career, I consider that said Investigative Report is worthy of approval as it complies with the technical standards, translation and formats provided, as well as having incorporated the observations and recommendations proposed in the pre-defense.

Pujili, August 22, 2024



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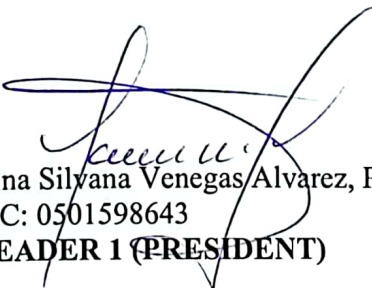
APPROVAL OF THE DEGREE COURT

As a Court of Readers, they approve this Research Report in accordance with the regulatory provisions issued by the Technical University of Cotopaxi, and by the Pujilí Extension; because, the applicants: Pinto Paucar Dennis Andres; Rosario Dominguez Jhon Dennis, with the title of the Project “**THE INTERFERENCE OF THE SPANISH MOTHER TONGUE ON ENGLISH PRONUNCIATION IN UNIVERSITY STUDENTS**”, have considered the recommendations issued in due time and have sufficient merits to be submitted to the defense act of the degree work.


For the above reasons, it is authorized to record the corresponding files on a CD, according to the institutional regulations.

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For the record, signed by:



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GRATEFULNESS

I would like to express my deepest gratitude to my family, who have been my fundamental pillar throughout this process. Thank you for your unconditional love, your constant support and for the trust you have placed in me at all times. Without your encouragement and sacrifice, this achievement would not have been possible.

To my teachers, I am grateful for sharing their knowledge and experiences with me. Your patience and dedication in teaching and guiding me have been essential to my academic and personal growth. Your commitment and effort have pushed me to overcome every challenge.

DEDICATION

I dedicate this thesis to my family, who have been my refuge and my source of inspiration in every step of this journey. To my parents, for their daily sacrifice and their unwavering faith in me. Your words of encouragement and constant support have been the beacon that has guided me through the difficulties. To my siblings, for their contagious joy and unconditional support, which has always given me strength in the most difficult moments. This achievement is as much yours as mine. To my thesis tutor, for his wise guidance and his confidence in my potential, which has been a pillar in this journey. Thanks to all of you for being by my side, for believing in me and for being a fundamental part of this dream come true.

TECHNICAL UNIVERSITY OF COTOPAXI

PEDAGOGY OF NATIONAL AND FOREIGN LANGUAGES

UNDERGRADUATE PROGRAM

THEME: The interference of the Spanish mother tongue on English pronunciation in university students.

Author:

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ABSTRACT

This research explores the interference of the Spanish mother tongue in the English pronunciation of university students. This study focused on a group of Spanish-speaking university students. The main objective was to analyze the interference that students faced with the Spanish mother tongue in their English pronunciation in the first semester at the Technical University of Cotopaxi in the period March - August in the year 2024. The methodology employed a mixed approach, incorporating qualitative descriptions and quantitative measures through a recorded pronunciation test that was used as an instrument. 10 participants were selected through convenience sampling. The age was between 18 and 20 years old. Students were asked to read a list of words in English, these words were selected according to their level of English. Patterns of phonetic substitution and omission were documented, revealing common areas of difficulty that align with the linguistic features in Spanish. The findings indicated that certain phonemes in Spanish lack direct equivalents in English, leading to notable pronunciation errors that can hinder comprehension. Furthermore, the research highlighted persistent problems such as vowel reduction and simplification of consonant clusters that differ between the two languages. Finally, this study contributed to the field of applied linguistics by providing insight into the specific challenges faced by Spanish-speaking learners of English.

Keywords: English Pronunciation, interference, pronunciation test, Spanish mother tongue, university students

UNIVERSIDAD TÉCNICA DE COTOPAXI

CARRERA DE PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y EXTRANJEROS

TITULO: “La interferencia de la lengua materna española en la pronunciación del inglés en estudiantes universitarios”

Autores:

Rosario Domínguez Jhon Dennis

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RESUMEN

Esta investigación explora la interferencia de la lengua materna española en la pronunciación del inglés de estudiantes universitarios. Este estudio se centro en un grupo de estudiantes universitarios hispanohablantes. El objetivo principal fue analizar la interferencia que enfrentaron los estudiantes con la lengua materna española en su pronunciación del inglés en el primer semestre en la Universidad Técnica de Cotopaxi en el período marzo - agosto en el año 2024. La metodología empleó un enfoque mixto, incorporando descripciones cualitativas y medidas cuantitativas a través de una prueba de pronunciación grabada que se utilizó como instrumento. Se seleccionaron 10 participantes mediante un muestreo por conveniencia. La edad estaba entre 18 y 20 años. Se pidió a los estudiantes que leyeran una lista de palabras en inglés, estas palabras fueron seleccionadas de acuerdo con su nivel de inglés. Se documentaron patrones de sustitución y omisión fonética, revelando áreas comunes de dificultad que se alinean con las características lingüísticas presentes en español. Las conclusiones indicaron que ciertos fonemas en español carecen de equivalentes directos en inglés, lo que lleva a errores de pronunciación notables que pueden dificultar la comprensión. Además, la investigación destacó problemas persistentes como la reducción vocálica y la simplificación de grupos consonánticos que difieren entre los dos idiomas. Finalmente, este estudio contribuyó al campo de la lingüística aplicada al proporcionar información sobre los desafíos específicos que enfrentan los estudiantes hispanohablantes de inglés.

Palabras clave: Estudiantes universitarios, interferencia, lengua materna, pronunciacion del inglés, prueba de pronunciacion.

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UNDERGRADUATE DEGREE WORK STRUCTURE

1. GENERAL INFORMATION

Theme: The interference of the Spanish mother tongue on English pronunciation in university students.

Starting Date: April 2024

Ending Date: August 2024

Place of Research: Pujilí - Cotopaxi- Technical University of Cotopaxi

Sponsoring Faculty: Pujilí Extension

Sponsoring career: Pedagogy of National and Foreign Languages

Undergraduate Program

Linked Research Project: no if applicable

Macro Project of the career: Training processes in the teaching and learning of English as a foreign language in educational institutions in the province of Cotopaxi.

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Research line: Education, communication, and graphic design for human and social development.

Research line of the career (if applicable): Education, linguistics, literature, interculturality, and society

2. PROBLEM STATEMENT

According to Haldried, (2020), the mother tongue refers to the first language learned in childhood by the parents or family members and still understood by the person at the moment. On the other hand, Manjula, (2021) emphasizes that English pronunciation is a way of producing meaningful speech sounds when people speak. It includes vowels, consonants, stress, rhythm, and other aspects of speech. These elements all work together, so issues in one area can affect the others, making pronunciation easy or hard to understand. All these elements work together. For this reason, it is common for people to have mother tongue interference when pronouncing a word in English because they tend to confuse Spanish dialects and use them in the same way in English.

Putri, et. al. (2020) mention that native language interference in English pronunciation is a common phenomenon among university students whose native language is not English. The problem of this research is based on how the Spanish mother tongue interferes with the English pronunciation of students learning English in the first semester at the Technical University of Cotopaxi in the period March - August 2024. Haldried, (2020) mentioned that the causes of this phenomenon are diverse and may include phonetic differences between both languages, and the influence of specific sounds that do not exist in the mother tongue. This cause that the students do not know the errors and do not improve their English pronunciation.

As Suadiyatno, (2020) mentioned that mother tongue automatically interferes with the English phonetic of learners because the sounds of the English words they produce do not exist in their mother tongue. For this reason, another problem at the Technical University of Cotopaxi is the lack of knowledge about the phonological problems that the students have when pronounced in English. This affects communication with other students and listening comprehension. According to Mclean, (2013), students may have difficulty reproducing sounds that do not have relationship in their native language, affecting their ability to improve. In addition, differences can result in unnatural pronunciation and difficulty picking up the right rhythm. Also, the interference of specific sounds that do not exist in the native language may lead to confusion in word identification, affecting listening comprehension and oral production. Therefore, to overcome these challenges, it is necessary to identify how the Spanish mother tongue interferes with the pronunciation of the students to improve their oral proficiency in English. In addition, the objective of this research is to analyze the interference that the students faced with the

Spanish mother tongue in the English pronunciation of students in the first semester of Pedagogical of the Foreign and National Language at the Technical University of Cotopaxi in the period March - August 2024. To know these aspects. This will cause the students to have good English pronunciation in the future. Finally, this study had an educational impact because in this way, English teachers will learn which aspects of the mother tongue interfere with the pronunciation of English words. Consequently, teachers will be able to work on these aspects that cause pronunciation problems to achieve better results for their students. Therefore, this research aims to answer the following research questions.

1. What are the common errors in English pronunciation that students have in the first semester?
2. What are the specific phonetic errors and the interference of the Spanish mother tongue in the English pronunciation that students faced in the first semester.?

3. OBJECTIVES

3.1 General objective:

To analyze the interference that the students faced with the Spanish mother tongue in English pronunciation in the first semester at the Technical University of Cotopaxi in the period March - August 2024.

3.2 Specific objectives:

1. To examine literature about the interference of the mother tongue in English pronunciation.
2. To identify the common errors in English pronunciation that students have in the first semester.
3. To describe phonetic errors and the interference of the Spanish mother tongue in the English pronunciation that students faced in the first semester.

4. ACTIVITIES AND TASK SYSTEM ABOUT THE OBJECTIVES PROPOSED

Table 1: Objectives proposed.

| Specific objective | Activities | Verification Means |
|--|--|---|
| To examine literature about the interference of the mother tongue in English pronunciation. | Look for information. Read articles, thesis, papers, etc. Summarize appropriate information. | Theoretical Framework. |
| To identify the common errors in English pronunciation caused by the interference of the Spanish mother tongue in students of the first semester. | Adapt the instrument. Pronunciation test. Recording word list. | Results. Quantitative tables. |
| To describe specific phonetic errors and the interference of the Spanish mother tongue in the English pronunciation that students faced in the first semester. | Observation of the instrument' application. Observation of the results in the tables. | Qualitative descriptions. Conclusion Recommendation |

5. JUSTIFICATION

The interference of the Spanish mother tongue in the pronunciation of English is a critical phenomenon that significantly impacts the acquisition of a second language in Spanish-speaking contexts. This problem is especially important in the university environment, where the mastery of English is essential not only for academic success, but also for improving the quality of communication. Therefore, this research based on the interference of Spanish in the pronunciation of English in students of the Technical University of Cotopaxi in the first semester in the period March - August 2024, is beneficial at an educational level.

In addition, it will propose practical solutions where future English teachers can understand the problems of students and improve the deviations in the English pronunciation, caused by the interference of Spanish to help students overcome these pronunciation problems.

The main beneficiaries of this research will be the students of the Technical University of Cotopaxi in the first semester in the period March - August 2024. By addressing and correcting their specific pronunciation problems caused by interference from their native language through English teachers, they will be able to improve their ability to speak English more clearly and effectively, which will help them to better participate in their classes and in other academic contexts. Finally, this study is highly feasible. We have the necessary human resources, availability of bibliography and adequate tools to find the problem that students have in English pronunciation. These elements ensure that the study is not only feasible, but will also have a positive and lasting impact on the teaching of English.

6. SCIENTIFIC AND TECHNICAL FOUNDATION

6.1 Background

An important study created by Jam, et. al. (2014) focused on this issue by examining 60 first-year EFL students from three universities in Iran. The study involved 40 selected words, and the participants were tested using a read-aloud technique. The key finding was that, while English vowels posed more challenges overall than consonants, the most difficult aspect for the participants was dealing with silent consonant letters. These findings have implications for second language acquisition, suggesting that L2 teachers can enhance the learning process by specifically addressing problematic English words with their students.

Previous regional studies have also contributed to this study. For example, Chavez, et. al. (2021) conducted a study titled "Phonological interference - English and Spanish" on the accurate pronunciation of English by first-year undergraduate modern language students at the East Campus of the University of El Salvador. The aim was to identify speech disorders in Spanish Integrate students into English pronunciation. The instrument was a phonological test consisting of 35 items. The results showed that 57.74% failed to identify the consonants. 56.95% of people have problems with vowels.

Another study was Tavares and Almanzar (2020) who investigated a study titled Spanish Language Intervention in Spanish Students' English Learning. MECYT English Immersion Program. The purpose was to define and explore the interference that Spanish presents to English as a foreigner The process of language learning and its impact or consequences on learners Room 305 - English immersion program with morning and afternoon shifts MESCYT, Dominican National Evangelical University of Santiago Republic. The tool was a questionnaire. It turns out that research on second language disorders suggests that foreign languages Learners tend to rely heavily on native language structures and vocabulary, especially when answer accordingly in the target language.

In addition, a study by Moraga (2021) who investigated a study entitled Negative effects on the mother tongue English as Second Foreign Language 9th Edition Senior at Naranjo High School. The objective was to analyze the impact of native language disorders on communication, In the ninth grade, students learn English as a foreign language Naranjo High School. In this study, the researcher used observation as an instrument. It turned out that English is too much hindered by the native language, which makes pronunciation difficult for most students.

Finally, Okafor et. al. (2023) conducted a study titled “Second Language Acquisition and Mother Tongue Influence on Learners. English Linguistics: A Case Study from El Carmen, Ecuador.” The main objective of this study was to analyze the impact of mother tongue (L1) on second language (L2) learning among students from El Carmen who are native Spanish speakers and who are learning English as a foreign language. The study used a combination of literature, monitoring tools, and practical assessments to examine how the influence of Spanish manifests itself in pronunciation, sentence construction, and application of English grammar rules. The results of the study revealed a clear interference of L1 in the L2 learning process. The study observed that students tend to transfer pronunciation patterns and grammatical structures from Spanish to English, which affects their pronunciation and proper use of English grammar rules. The research concluded that through constant contact with visual and written material in L2, as well as oral expression practice and corrective exercises, students can progressively correct these errors and replace L1 influences with L2 norms. This allows them to improve their pronunciation and grammatical mastery in English, the foreign language they have chosen to study.

6.2 Theoretical Framework

6.2.1 Interference of the mother tongue

Currently, students encounter limitations when speaking a foreign language due to phonological interference from their mother tongue. The distinct sound systems of the target language and the students' native languages can lead to interference or unfavorable transfer to the target language. Interference occurs when the target language deviates because individuals are familiar with more than one language. It involves the involuntary transfer, driven by habit, of the outward expression of the first language onto the expression of the second language. In addition, when international students communicate or create in the target language, they often rely on the syntax of their native language and the first language will have its own unique errors. The interference of the native language in the target language is obvious in this case. (Hayeesai, 2023). Furthermore, according to Reddivari, (2021) when a student is not fluent in a second language, their native language overwhelms the other language, leading to the conclusion that the influence of the native language is one of the pressing issues of foreign language teaching. Tongue. Similarly, interference occurs when learners make errors due to the influence of acquired language knowledge and established foreign language usage habits (Jami & Musuña, 2016). In addition, students also have difficulty speaking foreign languages due to the influence of the phonemes of their mother tongue. Every second language learner inevitably encounters his or her native language in the process of learning how to pronounce the second language.

When acquiring a new language, learners naturally draw upon their knowledge of their first language. The presence of one's native language in the mind remains indelible, as it is the initial language acquired from birth and an integral part of personal, social, and cultural identity. Besides, Odlin, (1989), defines mother tongue interference as the influence resulting from the similarities and the differences between the target language and any other language that has been learned before and is probably not perfect. However, interference includes word order, number, personal pronouns, genitive and possessive, this and that, past tense, be, objective forms, modal particles, active and passive voice, negation, sentence complexity, range and vocabulary to choose from, transfer and confusion Kasap & Emamvirdi, (2023).

Finally, interference in language learning involves errors influenced by one's native language. These errors, identified through probing into the mother tongue, result from linguistic transfer

where the first language influences the acquisition of a second language. This transfer stems from learners' perceptions and linguistic development in the process of learning a new language. Adding to the above, as stated by Shanmugasundaram & Jebakumar, (2022) Native language interference can affect students' English-speaking skills, especially pronunciation. Given that Tamil is the predominant native language used by students at the university level, ESL students often use their native language in their daily interactions and on campus, while university students pronounce English words differently.

6.2.2 Types of interference on English Language

The influence of the mother tongue in English manifests itself in many ways that influence the acquisition and use of the language. These types of impairments cover phonological, grammatical, lexical, semantic, pragmatic, orthographic, and cultural aspects, and each has a different impact on learners. Phonological Interference. Occur when "speakers transfer the pronunciation rules of their native language to their second language" (Brown, 2007, p. 94). For example, Mandarin speakers may have difficulty understanding the difference between /l/ and /r/, which are phonemes in English but not in Mandarin. Lexical Interference. Is the use of words that sound the same in your native language but have a different meaning in your second language.

According to Ellis, (2008), lexical interference can lead to misunderstandings when learners try to use cognates that do not have the same meaning in different languages. An example is the use of the Spanish word "embarazada" (meaning pregnant), which is mistranslated into English as "embarrassing". Semantic Interference. Occurs when learners transfer meaning from their native language to a second language, resulting in inappropriate word choices or misunderstandings. Odlin, (1989) explains, "Semantic interference occurs when the meaning of a word in one language is misattributed to a similar word in another language, confusing". Pragmatic Interference. Affects the performance of speech acts in different cultural contexts, and influences politeness strategies and conversational norms. Brown, (2007) stated that "pragmatic interference can lead to inappropriate language use in social interaction and affect the effectiveness of communication". For example, a direct communication style in English can be contrasted with an indirect communication style in Japanese.

6.2.3 Factors that cause language interference

Language impairment, the influence of a person's native language on the acquisition and use of another language, is influenced by several factors that affect different aspects of language learning. These factors can be broadly divided into linguistic, cognitive, and sociocultural dimensions, each of which plays an important role in influencing how and why interventions occur.

Linguistic Factors:

As Odlin, (1989) explains, “Structural differences between languages lead to systematic patterns of error in second language acquisition”. For example, the lack of articles in some languages (for example, Russian) can cause errors when using articles in English. Language Distance. Typological distance between languages, including similarities and differences in language structure, affects the degree of impairment. According to Ellis, (2008) “Generally similar language may show more pronounced impairments in students' second language learning”. For example, speakers of Romance languages may find it easier to learn other Romance languages because of shared structural features.

Cognitive Factors:

Transfer. Transfer is the application of knowledge or skills from one language to another. Positive transfer occurs when language similarities facilitate learning, while negative transfer (interference) occurs when differences between languages cause errors. Ellis, (2008) states that “transfer is a central concept that explains the ease and difficulty of second language acquisition”. Interlanguage Development. Interference can affect students' intermediate-level development of language skills, known as interlanguage. As learners develop, they can transfer structures and rules from their native language to their interlanguage, thereby affecting accuracy and fluency (Brown, 2007).

6.2.4 The consequences of interference in English

Native language intervention in English language learning can have a significant impact on language acquisition, affecting all aspects of communication, comprehension and skills. This phenomenon, often called language transfer or language impairment, occurs when the structures or rules of students' native language affect their use of English. While some of these effects

may be neutral or even beneficial, they often lead to errors that hinder effective communication. Speech disorders: One of the most obvious consequences is pronunciation. Students often encounter sounds that do not exist in their native language. For example, “many English language learners substitute sounds they have difficulty with in English with sounds in their native language” (Kasper, 1992).

This can lead to misunderstandings, as mispronunciations can obscure the original meaning. Vocabulary disorders: Vocabulary is another area where interference can have serious consequences. "Students "often misuse words that are similar in their native language and in English, called false cognates" (James, 1998). This can lead to confusion and poor communication, especially in formal or academic settings. Semantic Impairment: The meaning of native words will affect how students interpret English words. "This can lead to 'misunderstandings of English words or phrases, especially those that have multiple meanings'" (Cook, 2003). This semantic interference hinders reading skills and the ability to understand subtle meanings in English. Code-switching: A common consequence of language impairment is code-switching, when a learner "switches between the native language and English during conversation" (Poplack, 1980). While it may be a natural part of being bilingual, excessive code-switching can signal a lack of English proficiency and disrupt the flow of communication. Academic performance: Native language impairment can also affect academic performance. "Students who struggle with language impairments 'often struggle to master complex English language concepts,' which can affect their overall academic success" (Cummins, 2000).

Language learning anxiety: Finally, the errors of a language disorder can lead to increased anxiety. "Students who are constantly aware of their mistakes may 'experience language learning anxiety', which can further hinder their progress in English" (Horwitz, 1986). This anxiety creates a cycle of poor performance and low self-esteem. In summary, although the mother tongue plays a crucial role in the development of an individual's language skills, its interference in English language learning can lead to several problems. These problems, ranging from pronunciation difficulties to syntactic errors and cultural misunderstandings, highlight the importance of targeted language teaching to meet the specific needs of different language learners.

6.2.5 English phonology

English phonology involves the study of the sound system of the English language, including consonants, vowels, stress patterns, and intonation. Understanding English phonology is essential for language learners and linguists alike, as it can provide insight into pronunciation variations and regional accents. Consonants. English has a variety of consonants, including voiced and voiceless sounds. E.g. The voiceless dental fricative /θ/ "thin" and the voiced dental fricative /ð/ "this" are prominent sounds in English that can be confusing to non-native speakers because their absence causes problems. According to Roach, (2009) "Both sounds represented by the letter they are difficult for many English learners" Vowels. English vowels are characterized by a wide range of sounds, including monophthongs (simple vowels) and diphthongs (gliding vowels).

The English vowel system is particularly complex due to differences in dialects and accents. Crystal, (2008) states that "the complex vowel system of English presents significant difficulties for learners not only because of the large number of vowels but also because of the differences in vowel sounds between dialects". Stress and intonation. English is a stress-timed language, meaning that stressed syllables are pronounced at regular intervals, affecting the rhythm of speech. According to Cruttenden, (2014) "the intonation patterns of English are essential for conveying attitudes and feelings and distinguishing between questions and statements". Variations and Accents. Influenced by historical, geographical, and social factors, the phonology of English shows significant differences between different dialects and accents. For example, vowels in British English are pronounced differently than vowels in American English, affecting overall intelligibility and perceptual identity.

Wells, (2008) mentions that "the variety of English accents reflects the historical development and geographical distribution of the language, resulting in rich phonetic variation" (p. 214). In summary, English phonology consists of a complex system of consonants, vowels, stress patterns, and intonation that vary by dialect and accent. Learning English phonology is essential for effective communication and language comprehension, which underlines its importance in language studies and language pedagogy.

6.2.6 What are phonemes?

A phoneme is defined as "the smallest unit of sound capable of distinguishing a single word" (Crystal, 2008). In the context of English phonology, understanding phonemes is essential because they form the basis of pronunciation and language analysis. There are about 44 phonemes in English, including consonants and vowels. These phonemes are divided into different types based on their articulatory and acoustic properties. Consonant phonemes. In

In English, there are many sounds that are produced by obstructing or restricting the flow of air in the vocal tract. They are classified based on factors such as place of articulation (where the sound comes from the vocal tract), articulation (how they block the flow of air), and phoneme (whether the vocal cords vibrate). For example, the consonant phoneme /p/ is characterized by a voiceless bilabial plosive, which is produced by completely blocking the airflow at the lips. In contrast, /z/ represents a pronounced alveolar fricative that occurs when airflow is partially blocked at the tongue and alveolar ridge.

Vowel Phonemes. There are characterized by the height of the tongue, the forward movement of the tongue and the roundness of the lips. English vowel phonemes are very complex because of the wide range of sounds spread across different accents and dialects. For example, the vowel phoneme /ɪ/ (as in "set") is a high-front stressed vowel pronounced with the tongue raised high in the mouth. In contrast, /ɑ:/ (as in "car") is a low reaction stressed vowel produced by lowering and retraction of the tongue. Minimal Pairs and Phonemic Contrasts. For example, the words "pat" and "bat" have different initial phonemes (/p/ vs. /b/), showing how phoneme changes change meaning. According to Roach, (2009) "The ability to recognize phonemes and their contrasts is fundamental to understanding and producing spoken language" (p. 17). 36). This recognition ability allows speakers to accurately perceive and pronounce different words, thereby facilitating effective communication. Importance of learning:

6.2.7 What are dialects?

A dialect is a variation of a language that is used in a specific region or by a certain group of people. English has numerous dialects, each with its own unique vocabulary and grammatical structures. These differences reflect the diversity of English-speaking communities around the

world and play an important role in identity, communication, and cultural expression. Regional Dialects. Vary according to geographic location and historical influence. For example, British English shows clear regional differences, such as Cockney in London, Geordie in Newcastle, and Scouse in Liverpool.

According to Trudgill (2000), "Regional dialects often differ from each other in terms of phonology, grammar and vocabulary, reflecting historical settlement and ongoing social and cultural interaction" (p. 17). Also known as social dialect, reflects social factors such as socioeconomic status, educational level, and cultural background. These differences can be observed between different social groups in the same geographical area. In Britain, for example, Received Pronunciation (RP) has historically been associated with upper-class speakers rather than working-class dialects. Labov's (1966) study of New York English highlighted social stratification in language use, revealing unique phonetic features associated with different social groups. LaBeouf's research shows how language variation reflects social identity and interaction.

Globalization and Dialect Contact has encouraged more dialect contact and hybridization, resulting in new varieties of English influenced by multicultural interactions. Urban centers and digital communication platforms further accelerate the integration and development of dialects. Crystal (2003) states that "globalization has strengthened the ties between English-speaking communities, creating new forms of English that blend local dialects with global linguistic trends" (p. 112). In summary, dialects of English are diverse and dynamic expressions of regional, social, ethnic, and cultural identity. They enrich linguistic diversity, reflect historical and social contexts, and shape patterns of global communication. Understanding and studying dialect variation can improve our understanding of English as a living language that is constantly evolving and adapting to different contexts.

6.2.8 Pronunciation errors

Pronunciation errors during second language learning often occur due to various factors such as first language impairment, phonetic system differences, personal speaking habits, etc. According to Celce-Murcia et al. (2010), "Many English as a second or foreign language (ESL/EFL) learners find pronunciation difficult because the pronunciation of English is very different from that of their first language" (p. 3). This phenomenon, known as phonological

interference, in syllable structure between languages: "Differences in the syllable structure of the first and second languages can lead to errors" (p. 17). 250). For example, languages with simpler syllable structures can cause problems when students encounter more complex patterns of English.

Personal speech habits also play a crucial role. Roach (2009) states that "speakers bring sounds, sound patterns and intonation patterns from their native language into the target language" (p. 17). These habits can manifest as persistent mispronunciations that reflect the speaker's original speech patterns. Correcting these mistakes requires focused training and practice. Cerse-Murcia et al. (2010) emphasized the importance of "frequent and repeated feedback practice and clear instruction about phonetic differences" (p. 193). Educators can help reduce these errors by providing opportunities for students to practice pronunciation in meaningful environments and by providing corrective feedback. In short, pronunciation errors during second language learning are the result of a combination of language, phonetics, and personal factors. Understanding these factors and implementing effective teaching strategies is critical to helping students achieve clearer and more accurate pronunciation.

6.2.9 Types of pronunciation errors

Pronunciation errors in second language learning can be divided into several types, each of which is influenced by linguistic, phonetic and personal factors. Here are the main categories of pronunciation errors with their explanations and references: Phonemic Errors. These errors involve the substitution of one phoneme (speech sound) for another and are usually caused by a disruption of the learner's initial phonetic system. For example, a Spanish speaker may pronounce the English word "ship" as /ʃip/ instead of /ʃɪp/, using /i/ instead of /ɪ/ because Spanish lacks the free vowel /ɪ/.

Cerse-Murcia et al. (2010) explain that phoneme substitution involves replacing one sound with another, resulting in a new word or a meaningful word becoming meaningless. Stress and Intonation Errors. Incorrect placement of stress or intonation can change the meaning or clarity of an utterance. For example, stressing the wrong syllable in English 'record' (noun and verb) can lead to misunderstandings. According to Roach (2009), "learners may not be aware of the importance of stress, or they may tend to place stress in places that do not belong in English words or sentences" (p. 174). Segmental Errors. These errors involve inaccuracies in individual

sounds (consonants and vowels). For example, students may have difficulty pronouncing certain consonant clusters or vowel contrasts that do not exist in their native language. Brown and Abeywickrama (2010) stated, "Students may have trouble pronouncing specific sounds, sequences of sounds, and sound patterns in the target language" (p. 252).

Suprasegmental Errors, these errors refer to aspects of speech other than the person's voice, such as rhythm, tempo, and pitch. Speakers can be confused by the overall flow and melody of the language. Cerse-Murcia et al. (2010) mentioned that "suprasegmental features include stress, rhythm, intonation, and pitch" (p. 11). 155), all of which contribute to natural and intelligible speech. Fluency-related Errors. These errors affect the flow and rhythm of speech, such as hesitations, repetitions, or extra words (eg "um", "uh"). Although not strictly stated, they can affect the overall effectiveness of communication. In summary, pronunciation errors in second language learning take many forms and are influenced by native language impairments, differences in the phonetic system, and personal speech habits. By understanding these types of errors and implementing appropriate teaching methods, educators can help students acquire clearer and more accurate pronunciation, thereby improving their overall language skills.

6.2.10 Impacts of pronunciation errors

Pronunciation errors in second language learning can significantly affect communication efficiency, social interaction and general language skills. Understanding these influences is critical for both educators and students. The following is an exploration of the impact of mispronunciation, complete with citations and references. Communication Breakdown. Mispronunciation can lead to misunderstandings and communication barriers. Cerse-Murcia et al. (2010) emphasized that "speech errors can interfere with intelligibility and cause communication breakdowns" (p. 173). For example, mispronouncing a key word in a sentence can change its meaning, making it difficult for the listener to understand the intended message. Perceived Competence. Pronunciation errors can affect how students perceive native speakers.

Roach (2009) states, "Non-native speakers with poor pronunciation may be perceived as less competent or less fluent, even if their grammar and vocabulary are accurate" (p. 183). This perception can affect interactions in academic, professional and social contexts. Students may be reluctant to participate in conversations or avoid opportunities to practice speaking.

Professional and Academic Opportunities. In academic and professional settings, clear pronunciation is often associated with credibility and authority. Poor pronunciation can affect job opportunities, academic performance, and promotion opportunities. Roach (2009) stated, “In professional settings, clear and accurate pronunciation can enhance one's professional image and effectiveness” (p. 186).

Overall Language Proficiency. Pronunciation errors affect general language skills. Brown and Abeywickrama (2010) emphasized that “accurate pronunciation is an important part of communication skills” (p. 11). Correcting pronunciation errors can help improve fluency and understanding of the target language. In summary, pronunciation errors during second language learning can affect communication clarity, social integration, self-confidence, and career prospects. By understanding these influences and implementing effective teaching strategies, educators can help students achieve clearer and more accurate pronunciation, improve their general language skills, and integrate into the target language community.

7. METHODOLOGY

7.1 Research approach

The researchers employed a mixed-method to gain comprehensive knowledge on a specific topic because a pronunciation test was used to get percentages on errors checking and observation to written analysis to describe interference. As noted by Busetto et al., (2020) this research methodology involves the collection and analysis of quantitative and qualitative data. Consequently, this approach was instrumental in gathering pertinent information on how students' native languages affect their English pronunciation, specifically focusing on first-semester students of the National and Foreign Language Pedagogy program at the Technical University of Cotopaxi.

7.2 Research Method or Level

In this research, a descriptive study was used to analyze the relationship that students have based on the interference of the Spanish mother tongue in the pronunciation of English without modifying their context. According to Atmowardoyo (2018), descriptive research is used to describe the characteristics of a population or phenomenon under study. It addresses the

question "what?" For this reason, in this research, the method involved collecting information to identify the phonetic problems and the interference of the mother tongue in the pronunciation of English that first-semester students at this university present, which are caused by the interference of their mother tongue in the learning process.

7.3 Research context

This study was conducted as part of the study of National and Foreign Language Pedagogy at the Technological University of Cotopaxi, Pujilí Campus, in the period March - August 2024 in the first semester. The university is located in Pujilí Canton, Cotopaxi Province, Ecuador. Ten first-semester students of the National Pedagogical and Foreign Languages program, aged 18 to 20, participated in the study. The sample included five males and five females in the course. Similarly, the sampling method is used to select participants because it is a method in which the researcher selects the sample based on subjective judgment rather than random sampling (Suen et al., 2014). Therefore, the strategy used in this study is convenience sampling because this strategy is used to generate the sample based on the ease of access and willingness of people to participate in the sample. The sample was selected in the first semester because students at this level do not know about English pronunciation errors due to the interference of their mother tongue Spanish. On the other hand, informed consent is used because this document gives the person permission to participate in the research and allows the project researcher to collect information during the research to analyze and report the results obtained from the interview with the person. It is also important to note that the personal information obtained is not disclosed because the students are listed and the names of each participant are not provided.

(See Appendix 1)

7.4 Data collection procedure:

A pronunciation test was used as a data collection instrument. The instrument consists a list of words that students must read aloud, to find errors and interference. According to Gibson (2008) reading aloud is a useful diagnostic tool that helps of which the teachers assess the learners' pronunciation. The pronunciation test was adapted from Jam et al. (2014) and involved a careful selection of words appropriate for assessment. To select these words, Jam drew on Arab Moghadam and Senechal (2001), Ehri and Sofer (2002), Fender (2008), and Labov (1966).

They conducted a survey of word lists used by various researchers and identified approximately 100 words that presented inconsistencies between vowels and consonants. A group of these words were selected for this study.

For the pronunciation test 24 words were chosen and incorporated into a list. Eight of these words were designated for identifying vowel mispronunciations, while the other sixteen focused on consonant mispronunciation. Participants were instructed to orally articulate the words provided and indicate any unfamiliar terms. This pronunciation test was recorded by each participant. First, this instrument was used to identify the errors that students have and then to describe interference of the Spanish mother tongue through the errors in English pronunciation and describe the phonetic errors in the students of the first semester. Additionally, the data collection instrument has been reviewed and validated by three experts in the field, ensuring its relevance, clarity, and applicability to analyze the interference of Spanish in the pronunciation of English. (See Appendix 2, 3)

Table 2: International Phonetic Alphabet (IPA) consonant chart.

| | Bilabial | Labiodental | Dental | Alveolar | Retroflex | Glottal |
|-----------|----------|-------------|---------|----------|-----------|---------|
| Plosive | /b/ | | | | /t/ | |
| Fricative | | /v/ | /θ/ /ð/ | /s/ | | /h/ |

Source: IPA

7.5 Data analysis

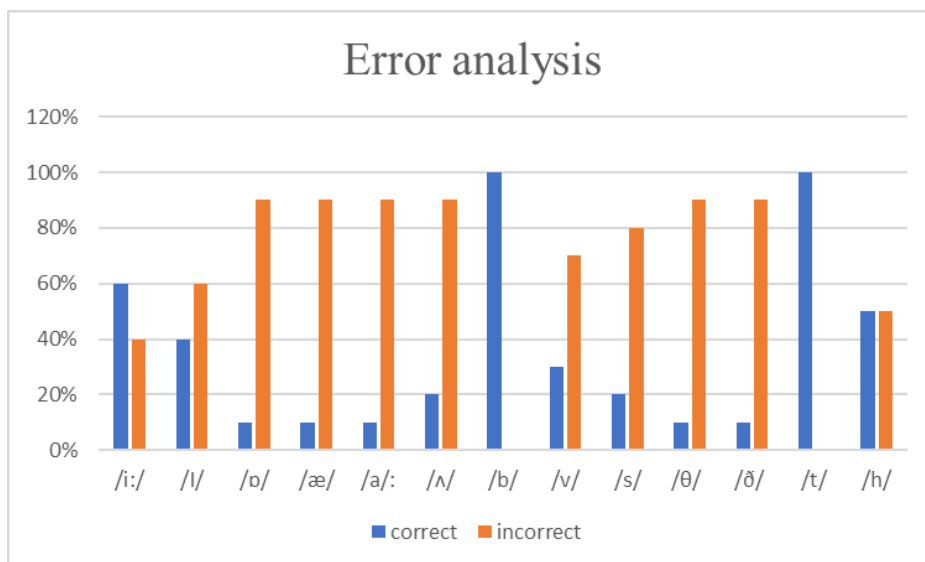
In the current study, the researchers used error analysis as a strategy to analyze the data, as it is a research technique used in second language teaching and linguistic research to examine the errors learners make when learning a language. According to Villegas (2020), error analysis involves identifying and classifying the errors that learners have when produce the other language. These errors may be related to pronunciation, grammar, vocabulary, and syntax, among other linguistic aspects. For this reason, the researchers first collected samples of students' linguistic production using a pronunciation test which was recorded. Then, the

| | | | | | | | | | | | | |
|----------------------|----------|-----|-----------|-----|---|-----|---|-----|---|-----|---|-----|
| | 1 | 10% | 9 | 90% | 1 | 10% | 9 | 90% | 6 | 60% | 4 | 40% |
| English phoneme | /h/ | | | | | | | | | | | |
| Ss. Pronunciation | correct | | incorrect | | | | | | | | | |
| | <i>f</i> | % | <i>f</i> | % | | | | | | | | |
| | 5 | 50% | 5 | 50% | | | | | | | | |
| | | | | | | | | | | | | |

Source: Autors'

Note: SS = students
f = frequency
 % = percentage

Graphic 1: Error analysis



Source: Autor's'

Analysis and discussion

Table three showed the errors that students faced in the first semester at Technical University of Cotopaxi. In total there were 13 phonemes, which were divided into correct and incorrect pronunciation. In addition, is possible to see the frequency and percentage. The first was the phoneme /i:/, it was found that the correct pronunciation has a frequency of 6 and a percentage of 60%, while the incorrect pronunciation had a frequency of 4 and 40%. The phoneme /I/ had a frequency of 4 and a correct percentage of 40% while the incorrect pronunciation had a

frequency of 6 and 60%. The following phonemes were where students have more errors, they were /a/, /æ/ and /a:/ with the same frequency level of 1 and 10% pronounced correctly, while the error had a frequency of 9 and 90% had an incorrect pronunciation. The next one was /ʌ/ where the students also had errors with a frequency of 2 and a percentage of 20% in the correct pronunciation, while 80% pronounced this phoneme wrong. The opposite occurred with the phoneme /b/, /t/, which had a frequency of 10 with 100% of the students pronouncing it correctly and there was one error of 0%. In the phoneme /v/ the students had complications with a frequency of 3 which is equivalent to 30% of correct pronunciations, while the other 70% pronounced the phoneme wrong. The next one is the phoneme /s/, it also showed that the students have difficulties with a frequency of 8 and 80% with errors, while only 20% had good pronunciation. In the phonemes /θ/, /ð/ they had a frequency of 9 and 90% of errors, while only 10% pronounced them correctly. Finally, in the phoneme /h/ with a frequency of 5, 50% had no pronunciation problems and the other 50% did have mistaken.

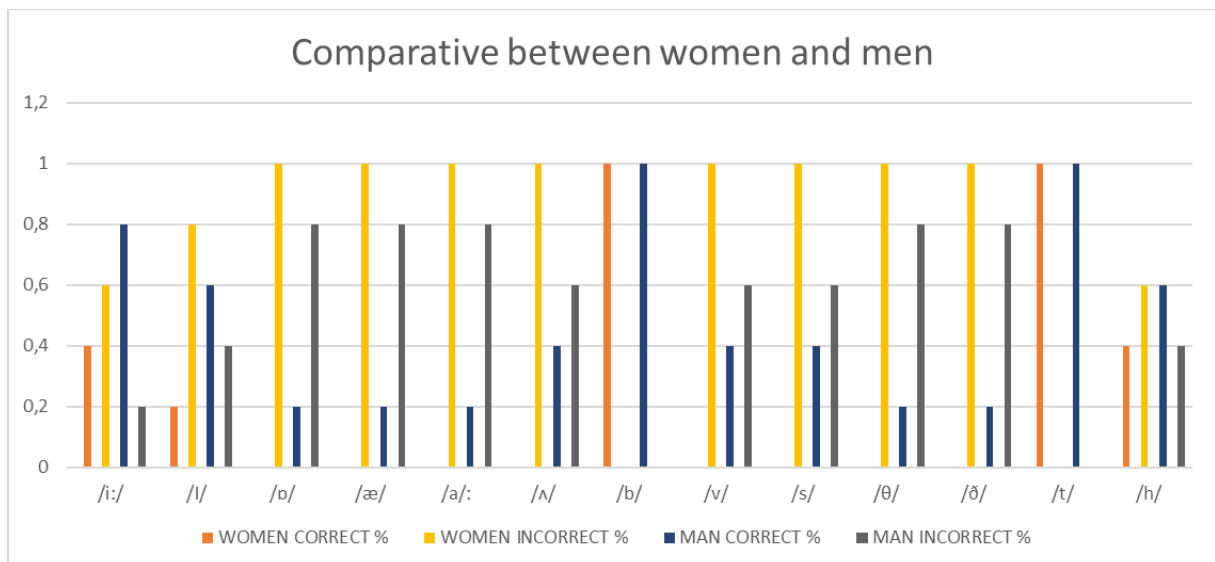
With all mentioned it is possible to say that the analysis of pronunciation errors found in first-semester students at the Technical University of Cotopaxi provided valuable insights into the specific errors faced by Spanish-speaking learners of English. The data, as shown in Table 4, underscore the variability in students' pronunciation proficiency on different phonemes of English, revealing patterns that are consistent with known difficulties in second language acquisition. One of the key findings of this study was the consistent difficulty that Spanish-speaking learners have with English vowel sounds that do not exist in their native language.

This is particularly evident with the English phonemes /v/, /ʌ/, /v/, and /æ/, which were often substituted by the Spanish phonemes /i/ or /a/. Pronunciation of consonants also posed errors, particularly with sounds such as /v/ and /θ/, which do not have direct equivalents in Spanish. Gass (1957) mentions that when learners encounter sounds that do not exist in their first language, they substitute them with the closest native sounds or omit them altogether. This is consistent with the findings of the current study, where learners often replaced /v/ with /b/ and /θ/ with /t/ or /ð/ with /d/. Such substitutions are a common problem for Spanish-speaking learners of English, as reported in other studies in the field. Avery & Ehrlich (2019)

Table 4: Comparative table between women and men

| Women | | | | Man | | | | | |
|-----------------|----------|------|----------|------|-----------------|----------|------|----------|-----|
| English phoneme | Correct | | Errors | | English phoneme | Correct | | Errors | |
| | <i>f</i> | % | <i>f</i> | % | | <i>f</i> | % | <i>f</i> | % |
| /i:/ | 2 | 40% | 3 | 60% | /i:/ | 4 | 80% | 1 | 20% |
| /ɪ/ | 1 | 20% | 4 | 80% | /ɪ/ | 3 | 60% | 2 | 40% |
| /ʊ/ | 0 | 0% | 5 | 100% | /ʊ/ | 1 | 20% | 4 | 80% |
| /æ/ | 0 | 0% | 5 | 100% | /æ/ | 1 | 20% | 4 | 80% |
| /ɑ:/ | 0 | 0% | 5 | 100% | /ɑ:/ | 1 | 20% | 4 | 80% |
| /ʌ/ | 0 | 0% | 5 | 100% | /ʌ/ | 2 | 40% | 3 | 60% |
| /b/ | 5 | 100% | 0 | 0% | /b/ | 5 | 100% | 0 | 0% |
| /v/ | 0 | 0% | 5 | 100% | /v/ | 2 | 40% | 3 | 60% |
| /s/ | 0 | 0% | 5 | 100% | /s/ | 2 | 40% | 3 | 60% |
| /θ/ | 0 | 0% | 5 | 100% | /θ/ | 1 | 20% | 4 | 80% |
| /ð/ | 0 | 0% | 5 | 100% | /ð/ | 1 | 20% | 4 | 80% |
| /t/ | 5 | 100% | 0 | 0% | /t/ | 5 | 100% | 0 | 0% |
| /h/ | 2 | 40% | 3 | 60% | /h/ | 3 | 60% | 2 | 40% |

Source: Authors'

Graphic 2: Comparative between women and men

Source: Authors'

Analysis and discussion

The table four presented a comparative analysis of phoneme pronunciation accuracy between men and women in English. Women demonstrated a higher proficiency with certain phonemes, such as /i:/, where they achieve correct pronunciation between 60% respectively, while showing

problems with others like /ɒ/, /æ/, /ɑ:/, and /ʌ/, where they consistently score 0% correct. Conversely, men performed better overall, especially with the phonemes /I/, and /h/, achieving accuracy rates ranging from 60% to 80%. Also, men showed better performance in the pronunciation of /v/, /s/, and /θ/ compared to women, but still had significant difficulties. Both genders found the /b/, /t/ phonemes easy to pronounce, with a 100% correctness rate for both.

The data suggests that while there are specific phonemes that pose universal challenges, such as /ɒ/, /æ/, and /ʌ/, which were incorrectly pronounced by the majority in both groups, there are also gender-specific trends in phoneme accuracy. However, men also display significant difficulties with phonemes such as /I/, /θ/, and /ð/, indicating a broader challenge in certain vowel and consonant sounds. This analysis showed gender-specific variations in phoneme pronunciation accuracy, with men generally outperforming women, particularly in vowel sounds, although both groups exhibit distinct areas of difficulty.

The comparative analysis of phoneme pronunciation accuracy between males and females, as presented in the table 5 (above), reflects significant gender-specific trends that align with broader research on language acquisition and phonetic errors (c.f. Flege, Munro, & MacKay, 1995). Research indicates that phoneme pronunciation accuracy can be influenced by a number of factors, including biological differences (e.g., Hearing and auditory perception, physical structure of the vocal apparatus), language exposure (e.g., Age of acquisition, linguistic environment), and sociocultural influences (e.g., Attitudes towards language, preferred learning strategies). In this study, females demonstrated greater proficiency with certain phonemes, such as /i:/, achieving correct pronunciation rates of 60% and 40%, respectively. This research findings aligns with those of Weirich and Simpson (2014), who observed that females often excel in articulatory accuracy, particularly in vowel production. However, in this study women reported 0% in the pronunciation of phonemes such as /ɒ/, /æ/, /ɑ:/ and /ʌ/ but these particular sounds pose universal challenges, regardless of gender. This is consistent with previous research done by Best (2007), who highlights the difficulties faced by non-native speakers with certain English vowels that have no direct equivalents in their native languages.

On the other hand, men performed better overall, particularly with the phonemes /I/ and /h/, achieving accuracy rates ranging from 60% to 80%. This could be attributed to the fact that men often have a more robust exposure to diverse linguistic environments, which may enhance

their phonetic adaptability Foresti (2017) in this study, men also showed better performance in the pronunciation of /v/, /s/ and /θ/ compared to women, although they still experienced significant difficulties. This finding is in line with research carried out by Munro and Derwing (2008), who suggest that males may be more likely to employ compensatory strategies when faced with challenging phonemes. Both men and women found the phoneme /b/ and /t/ easy to pronounce, with a 100% correct rate; it supports the idea that some phonemes are universally easier to articulate, likely due to their presence in both the native and target language (Major, 2001). The data suggest that while there are specific phonemes, such as /ɒ/, /æ/, and /ʌ/, /ɪ/, /θ/, and /ð/ indicate that certain vowel and consonant sounds are particularly challenging, regardless of gender, these findings underscore the need for targeted phonetic training that addresses gender-specific needs, emphasizing the phonemes where they present the most difficulty, as suggested by Flege et al. (1997).

The analysis below responded to the second research question concerning the phonological errors and the interference of the Spanish mother tongue in the English pronunciation that students faced in the first semester. In this part, the errors were identified and put into a table with the Spanish and English Phonemes to identify the interference that students in the first semester faced.

Table 5: Interference with Spanish that students faced

| English vowels phonemes | Students' substitution | Spanish interference | Example | General observation |
|-------------------------|------------------------|----------------------|-----------------------------|--|
| /i:/, /ɪ/ | /i:/ | /i/ | key, heat, writing, hidden. | Students cannot differentiate the short and long sounds. |
| /a:/ - /ʌ/ - /ɒ/ - /æ/ | /a:/ | /a/ | heart, blood, want, bank. | Students used just one phoneme for whole words. |
| English vowels phonemes | Students' substitution | Spanish interference | Example | General observation |

| | | | | |
|----------|------|-----|---------------------------------|---|
| /v/ | /b/ | /b/ | van, vote. | Students only use the Spanish phoneme. |
| /s/ | /es/ | /s/ | scent, scene, sleep, school. | Students add a letter when pronouncing the phoneme. |
| /θ/ | /t/ | /t/ | healthy, bathroom. | Students replace the phoneme /θ/ with the Spanish phoneme /t/ . |
| /ð/ | /d/ | /d/ | this | Students replace the phoneme /ð/ with the Spanish phoneme /d/. |
| /h/ | /h/ | /h/ | hour, heroic, horizon, heir | Students omit the phoneme sound in some words. |
| /b/, /t/ | - | - | bat, time | Students do not present Spanish interference. |

Source: Autors'

Description of the Spanish interference

First-semester students had phonetic errors in pronouncing certain English words due to the interferences in the Spanish phoneme inventories in English pronunciation. Spanish had a single vowel /i/ that was close to the English /i:/ sound, but English also had the shorter, more relaxed /ɪ/ sound, which was not present in Spanish. As a result, students pronounced words like *hidden* and *written* with an /i:/ sound, making them sound similar to *heat* or *key*. Additionally, Spanish's /a/ had no distinction between the various English vowels /a:/, /ʌ/, /ɒ/, and /æ/, leading to potential mispronunciations of words like *want*, *blood*, *heart*, and *bank*, where these words were pronounced with the /a/ sound, as [want, blad, hart, and bank]. The distinction between /v/ and

/b/ in English also became a problem for students, as Spanish used /b/ for both sounds, resulting in words like *vote* and *van* being pronounced like [boat] and [ban].

The English /s/ sound, while similar to the Spanish /s/, presented errors in words like *scene*, *school*, *scent*, and *sleep* due to the raised letters at the beginning, which led Spanish speakers to pronounce [eschool] since Spanish pronounced it with the vowel /e/, as in *escuela*, *escena*, etc. Additionally, the absence of the sounds /θ/ as in *bathroom* and /ð/ as in *this* in Spanish, led students to substitute these sounds with /t/ or /d/, causing incorrect pronunciations like [batroom or dis]. Finally, the sound /h/, which was generally aspirated in English, was voiceless in Spanish, which could cause excessive aspiration or omission in words like *heroic* or *hour*, where Spanish speakers might have pronounced *hour* as [jour] or [heroi] with an exaggerated /h/. On the other hand, there were no errors with the phonemes /b/ and /t/ because they were practically similar to those in the Spanish language. In general, the influence of Spanish phonemes on English pronunciation led to several errors, mainly due to differences in vowel sounds and the absence of certain consonant sounds in Spanish, which could affect intelligibility in English.

Students that had phonetic errors in pronouncing English words did so because of interferences in the Spanish phonemes in English pronunciation. Canela J. (2022) stated that a key problem was the disparity in vowel sounds, as Spanish had a more limited set of vowel phonemes compared to English. For example, Spanish only had one vowel sound /i/ that was similar to the English /i:/ sound, but English also possessed the shorter, more relaxed /ɪ/ sound, which was absent in Spanish. This discrepancy often led Spanish speakers to mispronounce phonemes. Flege's study of English learners' pronunciation difficulties emphasized how this lack of distinction could significantly affect speech clarity. Additionally, Funke (2021) mentioned that Spanish speakers had errors with the various back vowels in English. The Spanish /a/ sound was used consistently in situations where English distinguished between several vowel sounds, such as /a:/, /ʌ/, /ɒ/, and /æ/. This led to mispronunciations of words such as those presented in the table (*want*, *blood*, *heart*, and *bank*) that were pronounced with the /a/ sound in Spanish. Alba (2006) mentioned that consonant sounds also presented difficulties.

The distinction between /v/ and /b/ in English was problematic because Spanish only had a single /b/ sound that replaced both sounds in English. This substitution caused words such as

vote and *van* to be pronounced as *boat* and *ban*, respectively. These substitutions not only altered the intended meaning but also made it difficult for listeners to understand the speaker's message. Moreover, the English /s/ sound, although somewhat similar to the Spanish /s/, posed different specific contexts, particularly when it occurred before certain consonants. Spanish speakers might have inserted an initial vowel sound, leading to pronunciations such as [school] instead of “school” or [escene] instead of “scene.” This phenomenon, known as epenthesis, occurred because in Spanish, the consonant cluster at the beginning of a word often required a preceding vowel, as seen in words such as “escuela” or “escena” (Celce et al., 2010).

Furthermore, the absence of the dental fricatives /θ/ (as in *bathroom*) and /ð/ (as in *this*) in Spanish led to their substitution by the closest available sounds, such as /t/ or /d/. As a result, Spanish speakers may have pronounced these words as *batroom* or *dis*, respectively. Major (2001) mentioned that this substitution could severely affect speech intelligibility, especially in contexts where these sounds were crucial for distinguishing between words. In addition, the English /h/ sound, which was aspirated and voiced, contrasted with the voiceless /h/ in Spanish. This could have led to over-aspiration or omission of the /h/ sound in words like *heroic* or *hour*, resulting in pronunciations like *our* or an exaggerated /h/. Goldstein (2001) showed that the treatment of the /h/ sound demonstrated how phonological differences could lead to overcorrection or underproduction of sounds, depending on the speaker's familiarity with English phonology. However, it was important to note that not all English phonemes posed difficulties for Spanish speakers. For example, the phonemes /b/ and /t/ were similar in both languages, meaning that Spanish speakers generally did not have difficulty with these sounds. Elliott (1995) stated that this similarity could provide a foundation for learners, allowing them to transfer their native language knowledge to certain aspects of English pronunciation without significant difficulty.

9. RESEARCH IMPACT

By highlighting phonetic errors and difficulties arising from native Spanish interference, the study will provide valuable insights into the cause of this phenomenon. This research has an educational impact because by identifying areas where students have difficulty, such as vowel sounds and certain consonants that lack direct equivalents in Spanish, this study will provide insights to improve language teaching. The findings have implications for teaching English pronunciation, emphasizing the differences between the phonological systems of Spanish and

English, which could significantly improve students' speech intelligibility and communication skills by providing the errors that students have. Finally, this research will delve deeper into the understanding of native language interference when learning a new language in order to understand and reduce communication barriers for Spanish-speaking students learning English.

10. CONCLUSIONS AND RECOMMENDATIONS

The analysis of the literature review shows that English pronunciation is closely related to the native language. Phonological differences between the two languages are primarily responsible for errors such as sound substitution and omission and incorrect application. Furthermore, the analysis of the literature review highlighted the importance of native language phonological interference on learners' pronunciation. This review presented key themes essential to understanding the critical aspects of this problem and minimizing the impact of native language phonological interference on English learners.

The analysis of pronunciation errors among first-semester students at the Technical University of Cotopaxi reveals critical insights into the specific errors found by Spanish-speaking learners of English. Students demonstrated relatively high proficiency with phonemes like /i:/, /b/, and /t/, where there is significant phonetic overlap between the two languages. However, they struggled with sounds such as /ɪ/, /a/, /æ/, /ɑ:/, /ʌ/, /v/, /s/, /θ/, /ð/, and /h/, which either lack a counterpart in Spanish or involve more subtle distinctions that are not present in their native phonological system.

Finally, the phonetic errors found by Spanish-speaking students in pronouncing English words stem primarily from the significant differences between the phonological systems of Spanish and English. Some phonetic errors were distinguishing between similar vowels, vowel inventory, and voiced and voiceless consonants. Also, the data highlights a clear pattern of difficulty with certain English phonemes, particularly those that do not have direct equivalents in Spanish. The limited set of vowel phonemes in Spanish, compared to the more extensive range in English, often leads to mispronunciations, particularly with vowel sounds such as /ɪ/ and various back vowels like /ʌ/, /ɒ/, and /æ/. Additionally, consonant substitutions, such as the replacement of English /v/ and /θ/ with Spanish /b/ and /t/, further complicate accurate pronunciation. These phonetic interferences can significantly impact speech intelligibility, leading to misunderstandings and communication barriers. However, certain phonemes that are

similar between the two languages, like /b/ and /t/, offer a foundation for Spanish speakers to build upon, potentially easing some aspects of English pronunciation. Understanding these specific errors can guide more effective pronunciation instruction, helping learners overcome these obstacles and achieve greater clarity in their spoken English.

Recommendations

It is recommended that an English pronunciation teaching program be implemented for Spanish speakers that addresses the specific differences between the two languages. This program should include activities that increase phonological awareness and provide practical exercises to correct common errors, such as substitution or deletion of sounds and incorrect application. In addition, adopting these strategies, educators can develop more effective methods that improve the clarity and fluency of Spanish-speaking students' speech.

It is advisable to design and implement new strategies focus on the sounds of English that represent the greatest errors for Spanish-speaking students. This curriculum should include activities that explicitly contrast English phonemes that do not have equivalents in Spanish, using auditory perception and phonetic production techniques to help students develop a deeper understanding and accuracy in pronunciation. In addition, the teaching material should incorporate interactive exercises that allow students to effectively practice and correct errors in the production of these specific sounds, thus strengthening their phonetic competence in English.

It is recommended that a teaching approach be implemented that combines explicit instruction in the identification and production of problematic phonemes in English, with a particular emphasis on vowel and consonant sounds that have no equivalents in Spanish. This approach should include ongoing diagnostic assessments to monitor students' progress and adjust teaching accordingly, ensuring that students receive the necessary support to overcome phonetic interferences that affect their intelligibility. In addition, a learning environment that reinforces students' confidence should be promoted, using activities that simulate real communicative situations and that allow them to apply and perfect their pronunciation skills in a practical and meaningful context.

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