



T.C.

TOKAT GAZİOSMANPAŞA UNIVERSITY

INSTITUTE OF GRADUATE EDUCATION

DEPARTMENT OF FOREIGN LANGUAGE EDUCATION

MASTER'S PROGRAM IN ENGLISH LANGUAGE EDUCATION

**SONGS AS MULTIMODAL PEDAGOGICAL TOOLS TO TEACH
L2 PRONUNCIATION TO HIGH SCHOOL EFL LEARNERS**

MASTER'S THESIS

İlke ACAR

Advisor: Assist. Prof. Hande ÇETİN

TOKAT, 2025

ETHICAL AGREEMENT

I hereby declare that my Master's thesis titled "Songs as Multimodal Pedagogical Tools to Teach L2 Pronunciation to High School EFL Learners", which I prepared under the supervision of Assist. Prof. Hande ÇETİN, is an original work that complies with scientific ethical values and rules, and that I will accept all legal sanctions if the contrary is detected.

.../.../...

İlke ACAR



JÜRİ KABUL VE ONAY



ACKNOWLEDGEMENTS

I would like to express my deepest gratitude to my esteemed supervisor, Assist. Prof. Dr. Hande Çetin, who has guided me throughout my thesis work and academic journey with her knowledge, mentorship, and understanding. She has been a role model not only academically but also on a personal level. Her support and patience have played a significant role in shaping this work.

I extend my thanks to my dear students, who contributed to this research by sharing the data that form the foundation of this study.

I would like to offer my sincere gratitude to my beloved husband, Abdurrahman Acar, whose knowledge and constant support have been invaluable in shaping this thesis. His love, patience, and understanding have been a great source of strength for me. I am also deeply grateful to my dear family, whose unwavering presence, love, and encouragement have been my greatest motivation throughout this journey.

Finally, I am also grateful to my friends and colleagues, who have helped me overcome the challenges encountered during the thesis process and have supported me throughout.

Additionally, I would like to emphasize that this study was prepared not only as an academic contribution but also to benefit my students and the educational community. I once again thank everyone who contributed to this goal.

ÖZET

YABANCI DİL OLARAK İNGİLİZCE ÖĞRENEN LİSE ÖĞRENCİLERİNE İKİNCİ DİL TELAFFUZUNU ÖĞRETMEK İÇİN ÇOK MODLU PEDAGOJİK ARAÇLAR OLARAK ŞARKILAR

Acar, İlke

Yüksek Lisans, İngiliz Dili Eğitimi Bilim Dalı

Tez Danışmanı: Dr. Öğr. Üyesi Hande ÇETİN

Şubat 2025, xi + 75 sayfa

Bu tez, lise düzeyindeki İngilizceyi yabancı dil olarak öğrenen öğrenciler için şarkıların çok modlu pedagojik araçlar olarak potansiyelini incelemektedir. Şarkıların İngilizce dil öğretimindeki rolünü ele alan çok sayıda çalışma bulunmasına rağmen, şarkıların özellikle segmental ve suprasegmental özellikler üzerindeki etkisini inceleyen araştırmalar sınırlıdır. Ayrıca, bugüne kadar bu konuyu Türkiye'deki lise öğrencileri bağlamında ele alan bir çalışma yapılmamıştır. Şarkıların yabancı dil sınıflarında yaygın olarak kullanıldığı göz önüne alındığında, telaffuzu geliştirme amacıyla kullanımı yeterince araştırılmamış olup, bu konuda çalışmaların yapılması gerekmektedir. Bu çalışmanın amacı, şarkı temelli derslerin lise düzeyindeki EFL öğrencilerinin segmental ve suprasegmental telaffuz becerileri üzerindeki etkilerini araştırmaktır. Zaman serisi araştırma deseni ve karma yöntem yaklaşımı benimsenen bu çalışma, başlangıç seviyesindeki yedi EFL öğrencisinden oluşan bir grup üzerinde 12 haftalık bir uygulama süreci boyunca gerçekleştirilmiştir. Öğrenciler, şarkıları içeren derslere katılmış ve telaffuzları, Cambridge University Press (2019) tarafından sunulan bir telaffuz ölçeği kullanılarak düzenli aralıklarla beş kez değerlendirilmiştir. Ek olarak, öğretmen gözlemleri ve notları uygulama sürecinde kaydedilen ilerlemelere dair nitel bilgiler sağlamıştır. Bulgular, şarkı kullanımının öğrencilerin bireysel seslerin telaffuzunu ve genel anlaşılabilirliğini önemli ölçüde geliştirdiğini ortaya koymaktadır. Ancak, intonasyon ve vurgu gibi suprasegmental özelliklerde anlamlı bir ilerleme gözlenmemiştir. Bu sonuçlar, telaffuz öğretiminde şarkıların entegrasyonunun değerini vurgularken, daha fazla araştırma yapılması gereken alanlara dikkat çekmektedir. Çalışma, eğitimcilere pratik öneriler sunmakta ve EFL sınıflarında telaffuzun tüm yönlerini geliştirmek için şarkıların kapsamlı kullanımı üzerine gelecekteki araştırmalara temel oluşturmaktadır.

Anahtar Kelimeler: EFL Öğretiminde Şarkılar, Telaffuz, Segmental Özellikler, Suprasegmental Özellikler



ABSTRACT

SONGS AS MULTIMODAL PEDAGOGICAL TOOLS TO TEACH L2 PRONUNCIATION TO HIGH SCHOOL EFL LEARNERS

Acar, İlke

Master's Thesis, Department of English Language Education

Advisor: Assist. Prof. Dr. Hande ÇETİN

February 2025, xi + 75 pages

This thesis explores the potential of songs as multimodal pedagogical tools for teaching English pronunciation to high school EFL learners. While numerous studies have examined the role of songs in English language teaching, limited research addresses their specific impact on pronunciation, particularly on segmental and suprasegmental features. Moreover, no studies to date have investigated this topic within the context of high school students in Türkiye. Given the widespread use of songs in foreign language classrooms, their application for improving pronunciation remains underexplored, necessitating research to determine their efficacy. The aim of this study is to investigate the effects of song-based lessons on the pronunciation skills of high school EFL learners, including both segmental and suprasegmental elements. Employing a time-series research design and a mixed-methods approach, the study involved a single group of seven beginner-level EFL learners over a 12-week intervention. Students participated in lessons incorporating songs, with their pronunciation assessed five times at regular intervals using a pronunciation scale directly taken from Cambridge University Press (2019). Additionally, teacher observations and notes provided qualitative insights into the progress observed during the intervention. The findings reveal that the use of songs significantly improved students' pronunciation of individual sounds and overall intelligibility. However, no notable progress was observed in suprasegmental features such as intonation and stress. These results underscore the value of integrating songs into pronunciation teaching while highlighting areas for further research. The study offers practical recommendations for educators and serves as a foundation for future investigations into the comprehensive use of songs to enhance all aspects of pronunciation in EFL classrooms.

Keywords: Songs in EFL Teaching, Pronunciation, Segmental Features, Suprasegmental Features

TABLE OF CONTENTS

	Page
ETİK SÖZLEŞME.....	
JÜRİ KABUL VE ONAY	ii
ACKNOWLEDGEMENTS.....	iii
ÖZET	iv
ABSTRACT.....	vi
TABLE OF CONTENTS.....	vii
LIST OF TABLES	ix
LIST OF FIGURES	x
LIST OF ABBREVIATIONS.....	xi
INTRODUCTION	1
Problem	1
Purpose of the Study	3
Research Question	3
Sub-Research Questions	3
Significance of the Study	4
Assumptions.....	5
Limitations	6
Definitions.....	6
THEORETICAL FRAMEWORK.....	7
Pronunciation Instruction	7
Factors Influencing Pronunciation Learning and Teaching	8
Learners	8
The Role of Native Language.....	17
Songs as a Multimodal Pedagogical Tools to Teach L2 Pronunciation.....	19
Studies with Young Learners	20
Studies with Adolescents.....	24
Studies with Adults.....	26
Pronunciation Learning Strategies	31
METHODOLOGY	33
Research Model.....	33
Population and Sample.....	33
Data Collection Tools	34

Data Collection Process	37
Intervention.....	38
Administration of Pre-test and Post-test Assessments	45
Data Analysis	45
FINDINGS AND DISCUSSION.....	47
First Research Question	47
First Sub-Research Question.....	50
Second Sub-Research Question	52
Third Sub-Research Question	54
Fourth Sub-Research Question	56
CONCLUSION AND RECOMMENDATION.....	60
Conclusion.....	60
Recommendation.....	61
REFERENCES	63
APPENDICES	70
Appendix 1. Data Collection Tool	70
Appendix 2. Texts used as Pre-test and Post-tests	71
Appendix 3. Curriculum Vitae	74

LIST OF TABLES

Table 1. Normality Test Results of the First Research Question.....	47
Table 2. Repeated Measures ANOVA Test Results	47
Table 3. Multiple Comparisons Results of the First Research Question	48
Table 4. Average Scores of Students for Pre-test and Post-tests	48
Table 5. Normality Test Results of the First Subquestion	50
Table 6. Friedman Test Results of the First Subquestion	50
Table 7. Multiple Comparison Results of the First Subquestion	51
Table 8. Normality Test Results of the Second Subquestion.....	52
Table 9. Wilcoxon Signed-Rank Test Results of the Second Subquestion	53
Table 10. Normality Test Results of the Third Subquestion.....	54
Table 11. Friedman Test Results of the Third Subquestion.....	54
Table 12. Multiple Comparison Results of the Third Subquestion	55
Table 13. Normality Test Results of the Fourth Subquestion.....	56
Table 14. Friedman Test Results of the Fourth Subquestion.....	57
Table 15. Multiple Comparison Results of the Fourth Subquestion.....	57

LIST OF FIGURES

Figure 1. Rubric used to assess pronunciation performance	35
---	----



LIST OF ABBREVIATIONS

EFL: English as a Foreign Language

ESL: English as a Second Language

IELTS: International English Language Testing System

CPH: Critical Period Hypothesis

NLM: Native Language Magnet

L1: First Language

L2: Second Language

VAK: Visual, Auditory, Kinesthetic

VARK: Visual, Auditory, Reading/Writing, Kinesthetic

ASR: Automatic Speech Recognition

FD: Field Dependence

FI: Field Independence

INTRODUCTION

The problem status, purpose, importance, assumptions, limitations and definitions of the terms used in the research are included in this section.

Problem

Since the early 1980s, there has been renewed interest in teaching pronunciation in teaching English as a Foreign Language, which intensified in the 1990s. This interest partly stems from the need to support adult learners who face difficulties without strong oral skills, particularly in achieving clear and intelligible speech. Educators have worked to expand pronunciation teaching methods, redefining foundational principles, goals, and roles for both learners and teachers. More professionals are now engaged in exploring communicative approaches and developing new instructional methods though there is still progress to be made (Brown, 2014).

Pronunciation is now recognized as a critical element of communicative competence, prompting a push for effective strategies to help learners develop functional speech patterns (Morley, 1991). Many international universities emphasize literature over linguistics and pedagogy in English-language programs, potentially weakening teacher preparation. Without a background in linguistics, teachers may lack essential phonological knowledge, and limited pedagogical training can lead to lecture-based instruction rather than interactive learning. This gap can cause insecurity in teachers' pronunciation skills, especially in EFL contexts. The balance between aiming for comfortable intelligibility versus native-like accents remains contentious. Pronunciation research is growing but does not always influence classroom practices due to a disconnect between academic findings and teacher accessibility (Jarosz, 2019). A study of U.S. MA TESOL programs found that effective phonology training includes real teaching experiences, use of learner narratives, instructional technology training, integration of current teaching methodologies, and a focus on speech intelligibility needs (Murphy, 1997; as cited in Celce-Murcia et al., 2010, p.280). According to a survey of ESL teachers in Canada, nearly half of the teachers reported feeling comfortable teaching pronunciation, while three-quarters expressed a desire for better training in pronunciation instruction (Foote et al., 2011). In Finland, while EFL teachers generally held positive beliefs about using songs or poems in language teaching, their actual use of these techniques was reported to be infrequent (Alisaari and Heikkola, 2017). This pattern was

consistent across individual teaching methods, where techniques viewed as effective for practicing skills like pronunciation or vocabulary were seldom implemented in practice. This implies that instructors' ideas and their methods in the classroom are not aligned. As in other countries, EFL teacher attitudes toward using songs reveal a dilemma in Türkiye. While teachers express highly positive views about the pedagogical benefits of songs, many report challenges, such as difficulty in finding suitable songs and a lack of sufficient resources to effectively incorporate songs into their teaching (Şevik, 2011). The deliberate planning of lessons or the intentional use of materials aimed at improving learners' pronunciation skills is not commonly observed among EFL teachers in Türkiye (Atılır and Su-Bergil, 2020). In a study conducted with Turkish prospective EFL teachers, it was observed that the candidates did not feel sufficiently knowledgeable and equipped about teaching pronunciation (Uzun, 2022). Although the use of songs in the target language is prevalent, especially at the beginner level, it frequently does not target a specific ability. This is evident when examining the curriculum and textbooks in Türkiye in English lessons, aside from the methods used by teachers (Şimşek and Dündar, 2017). Although no studies specifically focus on the impact of songs on the pronunciation skills of high school or adolescent learners, there are related studies to this topic available in the literature. Chromčáková (2022) addressed young EFL learners' pronunciation improvement in primary education in her thesis. Delibegović Džanić and Pejić (2016); Good, Russo, and Sullivan (2015); Izzah and Sukrisno (2017); Kahraman (2019); McCormack, Klopper, Kitson, Westerveld (2021); Rais, Pranowo, and Sari (2020); Saldıraner and Cinkara (2021); Wodecki (2014) worked on young FL/EFL/EAL learners to discover whether song use in the classroom is effective on their pronunciation skill. Baills, Zhang, Cheng, Bu, and Prieto (2021); Zhang, Baills, and Prieto (2023) were the only ones who investigated the effectiveness of song use on pronunciation skill of adolescent FL/ESL learners. However, the focus of their study were neither solely on pronunciation skill nor homogenous sample of adolescents. Başaran (2020); Bjorklund (2002); Durand (2019); Habboushi (1998); Jackson (2019); Mozell (2002); Rengifo (2009); Robinson (2024); Sağlam (2010); Vukićević and Ćirković-Miladinović (2023) explored the influence of musical aptitude, song use or singing on adult ESL/EFL/ESP learners. Considering the existing research, there is a noticeable gap in studies focusing on adolescents and the impact of song usage on pronunciation skills. Therefore, this study aims to investigate whether songs are an effective tool for teaching pronunciation to adolescent EFL learners. While the relationship between songs and pronunciation

instruction has been explored in previous studies, this research differs in several key aspects, such as intonation and stress targeted beside individual sounds and the characteristics of the sample group. The participants, aged 17–18, represent a demographic that has not been previously studied, with the exception of two prior studies conducted in different countries. However, these studies focused on slightly different aspects and did not involve the exact same age group (Baills et al., 2021; Zhang et al., 2023). Moreover, this study focuses exclusively on the impact of song use on pronunciation skills and supra-segmental features such as stress and intonation. These distinctions contribute to the uniqueness of this study within the field.

Purpose of the Study

This research aims to determine whether the use of songs in English lessons influences adolescent learners' pronunciation of individual sounds, the intelligibility and clarity of their speech, and their competence in supra-segmental features. In broader terms, this study aspires to determining whether there is an improvement in pronunciation success in the sample group at the end of the 12-week intervention by analyzing test results and measuring the extent of any observed differences. Additionally, it seeks to examine the role of songs as a pronunciation learning strategy based on insights from the literature. It was conducted and measured in accordance with research ethics and thus it is expected to be effective in eliminating uncertainties regarding pronunciation training both internationally and nationally.

To guide this study and address the identified gaps in the literature, the following research questions have been formulated. These questions aim to explore the role of songs in enhancing the pronunciation skills of adolescent EFL learners in Türkiye, ensuring a focused and systematic approach to the investigation.

Research Question

Do English lessons with songs have a significant effect on students' English pronunciation skills?

Sub-Research Questions

1. Do English lessons with songs have a significant effect on the intelligibility of students' pronunciation?
2. Do English lessons with songs have a significant effect on students' intonation?

3. Do English lessons with songs have a significant effect on students' stress patterns?
4. Do English lessons with songs have a significant effect on students' accuracy in individual sounds?

Significance of the Study

Pronunciation teaching has been a highly controversial and little-scrutinized topic in English language teaching. Pronunciation instruction faces two main issues: it is often neglected, and when addressed, it is usually reactive rather than strategically planned (Darcy, 2018).

Its absence is paradoxical—not because teachers are uninterested, but rather because they are unsure of how best to teach it. Experienced teachers may feel unprepared in pronunciation theory, while learners view pronunciation as vital for communication. As a result, despite enthusiasm from both teachers and students, pronunciation is frequently overlooked (Kelly, 2000).

Since pronunciation includes subdomains such as stress, rhythm, pitch, and intonation, materials for teaching pronunciation should not just consist of the teacher's speech or casual recordings. Considering these, songs are suitable for addressing all of these topics and also provide an engaging environment for improving pronunciation. They are also excellent resources in that they are abundant and can be used by teachers at any proficiency level (Millington, 2011).

Using songs as a way to teach pronunciation offers several advantages to language learners, especially adolescents. Listening to music is almost always the first choice of adolescents to enjoy and practice their second language, so it can be concluded that the songs are interesting and popular which make them a highly motivating and accessible resource for language learning (Szyszka, 2014). Songs foster a dynamic and engaging learning environment, providing opportunities for authentic language use, cultural exploration, and creative expression (Bokiev et al., 2018; Israel, 2013). Furthermore, songs cater to auditory, visual, and kinesthetic learners, accommodating different learning styles and preferences (Yu, 2023). Students actively engage in listening, singing, and imitating, which encourages active participation, multisensory processing, and experiential learning (Odisho, 2007).

EFL teachers can greatly benefit from songs in terms of teaching prosodic features that are quite evident in songs and their effect on listening skills. Songs are convenient to focus on identifying and going through stress and reduction. Songs can be chosen by teachers depending on what characteristics they want to work on (Parker, 2000).

It has not been studied intensively due to the lack of information on curriculum design or teaching methods (Atılır and Su-Bergil, 2020). Contrary to its undeniable importance in language acquisition, teaching EFL pronunciation is often not considered critical or desirable. There is a little amount of study looking at the effect of songs on pronunciation, and the existing studies employ diverse sample groups and research methodologies. Very little research has been done on this subject in Turkey, and no studies have directly targeted high school pupils, as this study does. In recent years, educators have increasingly recognized the potential of songs as a multimodal pedagogical tool for teaching English pronunciation. Considering the significant potential and the scarcity of research in this field, exploring the impact of songs on the pronunciation of adolescent EFL learners in Türkiye is crucial.

Assumptions

The study assumes that the pronunciation learning strategies used in the study, including the use of songs, are relevant and applicable to high school English language learners. The study also assumes that high school English language learners actively participate in the pronunciation learning activities throughout the intervention. It is assumed that the researcher implementing song-based pronunciation instruction has sufficient knowledge and competence on pronunciation skills, as well as the necessary training, and support to effectively integrate songs into their pedagogical practices. The rubric used in the experiment is assumed that it measures pronunciation level effectively considering it is developed by Cambridge Assessment English which is an organization that develops and produces Cambridge English Qualifications and the International English Language Testing System (IELTS). Finally, the second rater in the study is assumed to be a qualified tutor, capable of evaluating students' pronunciation levels using the rubric, based on his 15 years of experience in language teaching and his status as a chartered teacher.

Limitations

This study offers valuable insights into the use of song-based pronunciation instruction within a specific educational context in Türkiye. By focusing on a targeted group of learners, it highlights the potential of integrating music into language teaching to enhance pronunciation skills. The sample of this study does not represent all age groups of language learners or the broader population of learners in Türkiye. Additionally, the study does not fully consider contextual factors such as student motivation, prior language learning experiences, cultural backgrounds, or classroom dynamics, all of which could significantly impact the effectiveness of song-based pronunciation instruction. The relatively small sample size further limits the scope for generalization. Furthermore, the study assumes uniform effectiveness of the chosen intervention without accounting for individual differences in learning styles or preferences. While the findings provide meaningful perspectives, the external validity is confined to the specific context and conditions of this study, making it generalizable to similar educational settings with comparable learner profiles and teaching approaches.

Definitions

Segmental features: Segmental features refer to the individual sounds of a language, which are the basic units of speech. These include consonants and vowels, typically analyzed in isolation (Reed and Levis, 2015).

Suprasegmental features: Suprasegmental features extend beyond individual sounds and include elements that influence larger units of speech, such as syllables, words, or phrases. Examples of suprasegmental features are syllable structure, stress, rhythm, and intonation (Reed and Levis, 2015).

Intonation: Intonation is the way the voice rises and falls in pitch during speech, playing a crucial role in expressing and understanding thoughts, often perceived and used unconsciously (Kelly, 2000).

Stress: Stress refers to the emphasis placed on a syllable in a word, which involves a change in pitch, a change in the level of the speaker's voice, and lengthening of the vowel sound in that syllable (Kelly, 2000).

THEORETICAL FRAMEWORK

In this section, the theoretical framework of the study is discussed under the headings of pronunciation instruction, factors influencing pronunciation learning and teaching, songs as a multimodal pedagogical tool to teach L2 pronunciation and pronunciation learning strategies. Relevant studies on the use of songs to enhance pronunciation in the target language are reviewed under these headings.

Pronunciation Instruction

Pronunciation instruction has oscillated between marginalization and central importance in language teaching methodologies. Early approaches, such as the Grammar-Translation Method, largely neglected pronunciation, while methods like the Direct and Audio-Lingual Methods emphasized imitation and oral accuracy (Jarosz, 2019).

Teaching and learning English pronunciation are fundamental components of language education, contributing to students' communicative competence and overall language proficiency. Pronunciation encompasses both segmental features (individual sounds, such as vowels and consonants) and suprasegmental features, or prosody, which include stress, rhythm, intonation, pausing, duration, and pitch. These features play a critical role in effective communication and comprehensibility (Yağız et al., 2024). Understanding these elements is essential for teaching pronunciation effectively and enhancing learners' spoken language skills (Kelly, 2000).

A key focus in second language pronunciation is intelligibility, which prioritizes clear communication over native-like speech. Intelligibility reflects the listener's ability to understand the speaker's intended message and is affected by factors such as phonological accuracy, prosody, and contextual cues. Notably, a speaker can maintain intelligibility despite having a noticeable accent, as accentedness and comprehensibility are related but distinct concepts (Reed and Levis, 2015). Perfect pronunciation is not the ultimate goal; instead, communicative and functional language proficiency holds greater significance (Brown, 2014).

Contemporary pedagogy, especially under the Communicative Approach, emphasizes intelligibility over achieving native-like pronunciation. Suprasegmental features, such as stress and intonation, are recognized as pivotal for effective communication, though segmental accuracy remains important. Effective pronunciation

instruction targets persistent issues unlikely to improve without intervention, addressing both class-wide challenges and individual learner needs. Measurement methods, such as transcription tasks and comprehension assessments, are commonly used but have inherent limitations (Jarosz, 2019).

Listener variability, such as familiarity with accents or topics, further highlights the complexity of intelligibility. Research supports the integration of form-focused activities with communicative practice to ensure real-world applicability. Emerging technological tools and individualized instruction show promise in addressing specific pronunciation challenges more effectively (Reed and Levis, 2015).

Pronunciation instruction extends beyond transmitting sounds; it requires a sophisticated, multisensory approach that supports cognitive engagement. This is particularly important for adult L2 learners, who may experience "psycholinguistic deafness" due to cognitive biases rooted in their native language phonetics. Effective instruction facilitates a transformative journey, helping learners internalize new sounds and integrate them into their speech (Odisho, 2007).

The teaching model plays a decisive role in pronunciation instruction. Students need not memorize phonological terms but must understand how to produce sounds correctly and interpret intonation patterns (Gilbert, 2018). As Krashen (1982) emphasizes in his affective filter hypothesis, it is essential to create a motivating and anxiety-reducing learning atmosphere. High affective filters can hinder language acquisition, even when learners receive comprehensible input (Ni, 2012). By employing methods that stimulate students' minds and promote achievement-rich experiences, pronunciation skills can be taught more effectively, efficiently, and enduringly.

Factors Influencing Pronunciation Learning and Teaching

Learners

In a learning condition, characteristics of the learners is probably the most essential factor. The first set of factors influencing L2 pronunciation development aligns with the "participants" category outlined by Clark (1992). Clark emphasizes that language use is inherently a human activity, where individuals assume various roles (e.g., teacher, student, etc.). As participants in these interactions, individuals bring a range of personal characteristics or variables that reflect their unique traits or abilities, such as age, aptitude, and perceptual skills. These personal differences significantly impact the development of

L2 pronunciation. This understanding is supported by studies that emphasize the role of individual characteristics in language learning, including motivation, cognitive ability, and socio-cultural factors (Reed & Levis, 2015).

Age

Numerous elements, from the biological to the sociological characteristics of learners, impact the learning process. Among these, age stands out as a critical determinant. Many debates on age and language acquisition center on whether there is a biologically defined "critical period" during which language learning is more efficient and beyond which it becomes increasingly challenging (Brown, 2014). The Critical Period Hypothesis (CPH), first proposed by Lenneberg in 1967, is strongly related to this idea. The CPH posits that language acquisition is most effective during a biologically limited window, with abilities declining after this period.

Initially applied to first language acquisition, the hypothesis gained support from studies on children who missed early exposure to language, highlighting how delayed input can impair language learning. Researchers argued that language learning becomes significantly harder after puberty (Lenneberg, 1967; Bickerton, 1981; as cited in Brown, 2014). In relation to learning a second language, some researchers suggest the critical period ends around ages 12 or 13. However, this claim remains contentious, particularly when considering what constitutes "success," such as achieving native-like pronunciation (Brown, 2014).

Recent research delves deeper into age-related constraints by exploring neurological, phonological, cognitive, and emotional factors (e.g., Singleton and Ryan, 2004; Moyer, 2004; Birdsong, 1999, as cited in Brown, 2014). Biological aspects, such as neuromuscular plasticity and cerebral development, play a significant role. For instance, post-pubertal learners often struggle to attain native-like accents due to reduced neural flexibility. Despite this, many late adolescent and adult learners achieve high levels of communicative competence, even if their accents remain non-native (Brown, 2014).

The Native Language Magnet (NLM) theory further sheds light on how age influences speech perception. It describes how infants transition from recognizing all speech sounds to forming stable, language-specific phonetic categories. As individuals mature, "native language neural commitment" limits the ability to learn non-native sounds by reducing neural plasticity. However, non-native perception can still improve through

the formation of new phonetic mappings. The perceptual magnet effect explains why L2 learners struggle with perception, as native sound categories act as attractors, making it harder to distinguish new speech sounds that closely resemble native prototypes (Kuhl, 1993; Kuhl et al., 2008, as cited in Kkese and Karpava, 2022).

Age is a key factor in L2 pronunciation outcomes, but it is rarely central in research. Most studies (78%) focus on adults, often without detailing their ages, while 12% examine younger learners, typically teenagers. Few studies include older adults or explore age-specific differences (Couper, 2006; Henderson, 2008; as cited in Thomson and Derwing, 2015). Rare research on younger children includes Trofimovich et al.'s (2009; as cited in Thomson and Derwing, 2015) study of 7–8-year-olds.

To wrap up, age plays a significant role in how a second language is pronounced, with biological, cognitive, and neurological aspects shaping the learning process. Although the Critical Period Hypothesis proposes that language acquisition becomes more difficult after puberty, recent studies show that age-related limitations, like reduced neural plasticity, influence the ability to achieve native-like pronunciation. However, learners of all ages can still attain high communicative competence, indicating that age is just one of several factors affecting language learning success.

Aptitude

Aptitude is a pivotal factor in achieving proficient pronunciation in a second language. Language aptitude is a group of cognitive factors that are considered to be the basis of a person's capability to learn a language. These factors can differ based on the tools used to measure language aptitude. Generally, language aptitude includes skills like short-term memory, phonetic coding, grammatical sensitivity, rote learning, imitation, inductive learning, musical ability, transfer and combination abilities. Although a great deal of study has been done on language aptitude, little systematic research has been done on the relationship between various characteristics of language aptitude and learning pronunciation in a second language (L2). It's still unclear how musical skill and L2 pronunciation relate to one another; some research indicates a positive correlation, while others find none at all (Reed and Levis, 2015). Başaran (2020) conducted a thesis at Gaziantep University exploring the relationship between musical aptitude and pronunciation skills in EFL learners. The purpose of the study was to ascertain whether musical aptitude and EFL learners' pronunciation performance. It also looked at how

musical aptitude impacts pronunciation judgments and considered the influence of gender and age on this relationship. The sample consisted of 51 undergraduate students in the English Language Teaching program, with most having a B2 English proficiency level. The study measured participants' musical aptitude in tonal and rhythmic skills. Participants also provided audio recordings for pronunciation assessment, which were rated by native speakers. The findings indicated that musical aptitude and pronunciation performance were positively correlated, with musical aptitude explaining 14% of the variation in pronunciation. Gender and age did not significantly affect musical aptitude or pronunciation performance. It reveals the role of musical aptitude in predicting pronunciation ability and sets forth the potential links between musical ability and language acquisition. A recent study by Shao, Saito and Tierney (2023) examines the aptitude-acquisition link, the role of auditory processing abilities, specifically auditory acuity and audio-motor integration, in second language (L2) pronunciation development, focusing on how these skills impact the effectiveness of shadowing-based choral repetition training. The sample consisted of 47 Chinese high school EFL students, divided into an experimental group, which underwent 12 shadowing sessions over two weeks, and a control group engaged in non-pronunciation-related activities. Speech samples were collected pre- and post-training and rated for comprehensibility and accentedness. The results showed that shadowing significantly improved comprehensibility and reduced accentedness particularly in spontaneous speech tasks. Notably, pronunciation improvements, especially in accentedness reduction, were strongly associated with participants' audio-motor integration abilities, while auditory acuity showed a weaker, non-significant correlation. These findings suggest that learners with robust auditory-motor integration skills benefit more from production-based pronunciation training, whereas auditory acuity may be more relevant for perception-focused learning approaches.

In summary, aptitude, particularly musical aptitude and auditory processing abilities, plays a significant role in second language pronunciation development. The findings from various studies highlight how specific cognitive factors, such as musical ability and audio-motor integration, can influence pronunciation skills, suggesting that certain aptitudes could respond better to particular forms of pronunciation instruction. These insights underscore the importance of considering individual differences in language aptitude when designing effective pronunciation instruction.

Motivation

A key affective component of learning, motivation is essential to the success of second language acquisition (Brown, 2014). Widely studied across various disciplines, it has been shown to significantly influence learning outcomes (Weiner, 1986; Deci, 1975; as cited in Brown, 2014). Motivation in language learning involves several components, including learners' willingness, interest, and drive to engage actively in the learning process. It manifests in three primary forms: integrative, assimilative, and instrumental motivations. Integrative motivation reflects a desire for social inclusion, assimilative motivation pertains to the aspiration to blend indistinguishably within a community, and instrumental motivation arises from practical needs, such as educational advancement or career progression (Celce-Murcia et al., 2010). In the area of L2 pronunciation, motivation is often assessed using simple tools like scalar ratings or open-ended questions exploring learners' reasons for studying a language. While its importance is widely acknowledged, the exact influence of motivation on L2 pronunciation improvement remains difficult to pinpoint (Reed and Levis, 2015). Nagle (2018) conducted a longitudinal study on 26 English-speaking college students learning Spanish to discover the relationship between motivation and pronunciation development, specifically focusing on comprehensibility and accentedness. Over a year, learners' progress was tracked through speech samples rated by native Spanish speakers. Despite no explicit pronunciation training, students improved in both areas, with greater effort correlating with better pronunciation. Motivation, measured through surveys and questionnaires, showed a slight decline over time, though it remained crucial in driving effort. The study found that learners viewed pronunciation as a tool for vocabulary acquisition, with more target-like accents seen as an advanced goal. Nagle's findings underscore the role of motivation in sustained pronunciation improvement. Yüksel (2020) examines how song-based instruction affects high school students' enthusiasm to learn English and their cultural knowledge of the target language. Additionally, it evaluates improvements in their pronunciation skills as an ancillary outcome. The research involved seven high school students who participated in 12 song-based lessons over a semester. Their progress was tracked using pre-tests and four post-tests, alongside qualitative feedback and observational notes. The findings revealed that the lessons significantly boosted students' motivation to learn English and enhanced their understanding of cultural aspects embedded in the target language. Students identified songs as most effective for

pronunciation improvement (18 mentions), followed by listening skills (16 mentions). Quantitative results and anecdotal observations revealed that students became more accurate in articulating previously challenging sounds and words over time. Song-based lessons are highly effective in enhancing students' motivation and cultural engagement. They also positively influence pronunciation and listening skills, providing a practical, enjoyable medium for language learning. These findings highlight the pedagogical value of integrating music into English instruction to foster comprehensive skill development and sustained learner interest.

In brief, motivation contributes significantly to second language acquisition and pronunciation improvement, influencing learners' engagement and progress. Studies have shown that motivation, whether integrative, assimilative, or instrumental, can drive sustained effort in pronunciation development. Research, such as Nagle's longitudinal study and Yüksel's exploration of song-based lessons, underscores how motivation enhances learners' pronunciation, cultural awareness, and overall language proficiency. These findings emphasize the importance of fostering motivation through engaging and meaningful learning experiences to support long-term language development.

Exposure

Exposure frequency plays a crucial role in both first language (L1) and second language (L2) acquisition and processing (Ellis, 2002; as cited in Uchihara et al., 2023). Language acquisition depends largely on the amount of comprehensible input learners receive, especially in EFL settings where native exposure is limited. Teachers must provide models of the target language and create opportunities for students to engage with authentic input, both within and beyond the classroom. In ESL settings, where learners may still have limited interaction with native speakers, teachers should also promote increased exposure to the language to support pronunciation, vocabulary, and overall language development (Celce-Murcia et al., 2010). A study conducted in Japan explored how repetition affects the learning of spoken word forms in second language (L2) acquisition (Uchihara et al., 2023). Japanese university students learning English were assigned to three groups based on exposure frequency (one, three, and six repetitions) and learned 40 words paired with corresponding images. Participants were tested before, immediately after, and one week later. The evaluation focused on pronunciation (accentedness and comprehensibility) and the connection between spoken form and meaning. Results indicated that more exposures led to better form-meaning connection

and pronunciation immediately after the treatment. Additionally, cognateness influenced the impact of repetition on pronunciation, with six exposures resulting in moderate improvements in comprehensibility but only small effects on accentedness.

Language exposure benefits extend beyond active use. A study (Au et al., 2002, 2008; as cited in Reed and Levis, 2015) found that children who overheard a language without speaking it exhibited more native-like pronunciation compared to adult L2 learners. Similarly, classroom studies (Trofimovich et al., 2009; as cited in Reed and Levis, 2015) showed that listening and reading exposure alone led to speaking performance comparable to traditional speaking practice. In academic settings, frequent use of the L2 correlates with less accented speech. Korean students in the U.S. who used English more were rated as less accented, while greater L1 use corresponded to stronger accents (Yeni-Komshian, et al., 2000; as cited in Reed and Levis, 2015). A study (Moyer, 2011; as cited in Reed and Levis, 2015) also found reduced accentedness among students who engaged more often in L2 interactions. These findings underline the essential role of L2 exposure and use in pronunciation development.

Therefore, exposure frequency is essential for learning a first or second language, especially in settings where native speaker interaction is scarce. Studies have shown that increased exposure, whether through repetition or passive listening, significantly enhances pronunciation, comprehension, and the connection between spoken forms and meanings. Additionally, frequent engagement with the target language, even without active speaking, plays a key role in reducing accentedness and improving overall pronunciation, underscoring the importance of creating ample opportunities for language exposure in both EFL and ESL settings.

Amount of Experience

When considering learners with prior experience to English, it is important to first assess the type and scope of their prior pronunciation training. In some EFL contexts, this might involve repetitive drills led by instructors whose pronunciation deviates from standard norms, while in ESL multi-skill classes, explicit pronunciation training might be entirely overlooked, leaving learners unaware of their specific pronunciation issues (Celce-Murcia et al., 2010).

A study (Saito et al., 2021) investigated the effects of prolonged interaction on the growth of oral proficiency in a second language (L2), focusing on the learners' experience

and proficiency levels. Japanese EFL learners engaged in weekly videoconferenced conversations with native English speakers in the U.S. over a 12-week semester. Before and after the intervention, a storytelling exercise was used to elicit spontaneous speech, which was then examined using linguistic metrics. The findings, consistent with the componential perspective of L2 oral proficiency and development revealed that learners' prior experience and proficiency mediate the relationship between interaction and L2 speech improvement. While all participants showed gains in grammatical complexity and articulation rate, less experienced learners exhibited broader improvements across lexicogrammatical and fluency features. In contrast, significant advancements in phonological accuracy, such as segmentals and word stress, were observed only among more experienced learners, reflecting the gradual nature of phonological development in later stages. These results highlight the differential effects of long-term interaction based on learners' developmental stages.

Nagle and Huensch (2020) explored the relationships among intelligibility, comprehensibility, and accentedness in the speech of L2 learners of Spanish. They found that familiarity with L2 speech improved intelligibility, as listeners more familiar with L2 Spanish were able to transcribe utterances more accurately, supporting previous research findings (e.g., Kennedy and Trofimovich, 2008; as cited in Nagle and Huensch, 2020). However, this familiarity did not make the speech seem more comprehensible or less accented. It suggests that familiarity aids in understanding the speaker's intended message but does not necessarily decrease the cognitive effort required or change perceptions of the speaker's accent.

In conclusion, learners' pronunciation development is greatly influenced by their past English language experiences as well as the caliber of their preceding pronunciation training. Research indicates that sustained interaction, such as weekly conversations with native speakers, can improve L2 proficiency, with more experienced learners showing greater gains in phonological accuracy. Furthermore, familiarity with L2 speech enhances intelligibility but does not necessarily reduce accentedness or make speech more comprehensible, highlighting the complexity of pronunciation development and the need for targeted instruction.

Learning Styles

Learning styles refer to inherent, consistent, and favored approaches to acquiring, understanding, and retaining new knowledge and abilities (Reid, 1995; as cited in Carson and Longhini, 2002). These characteristics, which affect how people process and react to information in a learning context, are comparatively stable (Keefe, 1979; Skehan, 1991; as cited in Brown, 2014). In second language acquisition, and of course, in pronunciation learning, these styles play a key role by highlighting factors that affect learning and contribute to understanding how learners approach the task. The most well-known identification of learning styles was introduced by Walter Burke Barbe who identifies three learning modalities: visual, auditory, and kinesthetic (movement and touch), collectively known as "VAK." (Lin, 2024). Neil D. Fleming later expanded this to VARK by adding reading/writing as a fourth modality. Visual learners prefer observing and reading, auditory learners learn best by listening, and kinesthetic learners focus on learning through hands-on experience (Lin, 2024). For instance, Evers and Chen (2021) explored the impact of learning styles identifying them as visual/verbal and Automatic Speech Recognition (ASR) software on adult ESL learners' pronunciation improvement over a 12-week course. The control group (n=28) received teacher feedback, while experimental group 1 (n=33) used ASR with peer correction, and experimental group 2 (n=31) used ASR alone. Pre- and post-test results on reading tasks and live conversations were analyzed, factoring in learning styles. The findings indicated that learning styles significantly influenced performance in reading tasks, with visual learners outperforming verbal learners. Additionally, combining ASR with peer correction led to the greatest improvement in both reading and conversation tasks.

Another common classification of learning styles is field dependence and field independence. Field Dependence/Independence (FD/FI) is a cognitive style that reflects how individuals process information and interact with their environment (Dreyer, Wissing and Wissing, 1996). Research indicates significant links between FI/D and specific personality traits and social behaviors. Field-independent individuals are described as analytical, reflective, detail-oriented, and tolerant of ambiguity, while field-dependent individuals are characterized as holistic, impulsive, and globally focused (Elliott, 1995). Elliott (1995) analyzed 12 factors influencing pronunciation accuracy and specifically the evident relationship between hemispheric specialization (individual cognitive styles) and FI/D of 66 intermediate Spanish learners at Indiana University. The

most significant factors were (a) individual concern for pronunciation, (b) field independence (FI) measured by the Group Embedded Figures Test, and (c) right-hemispheric specialization (RT) during a free-speech exercise. The findings showed that field independence (FI) was the second most significant predictor of pronunciation accuracy, behind attitude. FI individuals performed better in tasks like repeating sentences, reading words in isolation, and spontaneous speaking. Notably, controlled exercises showed a clear FI profile, while in the more meaning-focused section both FI and right-brain dominance (RT) were linked to better pronunciation. Overall, FI was the strongest predictor of pronunciation accuracy across the test. Dreyer et al.'s study (1996) investigated the relationship between cognitive styles and ESL pronunciation accuracy in tasks involving perception and production. Results showed that field independence and right-brain dominance correlated with better perception of final consonants, while field dependence and left-brain dominance were linked to better production of initial consonant aspiration. Intuition was associated with improved perception of final consonants and vowel pronunciation accuracy, while a high need for cognition improved vowel length accuracy. These findings suggest complex interactions between cognitive styles and pronunciation. A recent study investigated EFL learners' opinions on factors affecting pronunciation learning, one of which is about learning styles (Lubna and Toyyibah, 2024). They found that learning styles were the lowest factor that affected English learning; it showed that by the number of questionnaires, there were (57%) of students agreed and (40%) disagreed.

In conclusion, understanding learning styles, including field dependence/independence and VAK modalities, is crucial for improving second language pronunciation. While research has shown varying impacts of these styles, factors like field independence and hemispheric dominance remain significant predictors of pronunciation accuracy. These insights suggest the importance of tailoring language learning approaches to individual cognitive styles to enhance overall learning outcomes, particularly in pronunciation tasks.

The Role of Native Language

A major influence on L2 pronunciation development is the learner's L1, as perception errors and foreign accents are often closely tied to their native language (Reed and Levis, 2015). A number of theories, including contrastive analysis, have examined how a learner's first language affects their ability to pick up a second language's phonetic

system. According to this hypothesis, which was put forth by Lado (1957; as cited in Celce-Murcia et al., 2010), a learner's first language has an impact on their acquisition of a second language, helping when the structures are similar and impeding when they are different. Initially widely accepted for explaining challenges in syntax, morphology, and phonology, it was later criticized for failing to accurately predict difficulty levels and for conflicting with findings from error analysis and interlanguage research (Celce-Murcia et al., 2010). Another models explaining how second language (L2) speech perception and production develop, particularly in relation to the learner's first language (L1) are the Perceptual Assimilation Model (Best and Tyler, 2007; as cited in Reed and Levis, 2015) and the Speech Learning Model (Flege, 2002; as cited in Reed and Levis, 2015). These models emphasize that L2 learners' ability to detect cross-language pronunciation differences determines their success. They rely on perceptual measures, such as comparing L2 vowels to L1 vowels, to predict difficulty. On the other hand, markedness theory, introduced by Trubetzkoy (1939; as cited in Celce-Murcia et al., 2010) and Jakobson (1941; as cited in Celce-Murcia et al., 2010) suggests that in linguistic oppositions, one element is unmarked (more universal, basic, and frequent) while the other is marked (more specific and less frequent). This theory explains phonological differences between languages. For example, English allows both voiced and voiceless stop consonants in word-final positions, making it more marked than German and Russian, which only allow voiceless stops. Another important theory, in this context, is Interlanguage Theory which refers to the transitional linguistic system second language (L2) learners create as they progress from their native language (L1) to full proficiency in the target language (L2). Interlanguage is neither a learner's native language nor the target language but is a separate system with its own rules. It is distinguished by the formation of specific internal rules that may represent aspects of both the target and native languages (Selinker, 1972). It highlights that learners' speech is a blend of both L1 and L2 features, and it evolves over time as they approach fluency. Corder (1967) also suggest that errors in the process of language learning are a natural part of interlanguage. These mistakes are systematic rather than random, as students actively generate rules based on their current understanding of both their first language and second language.

In conclusion, various theories explore the impact of a learner's first language on second language pronunciation. The Perceptual Assimilation and Speech Learning Models highlight the role of cross-language perceptual differences, while theories like

markedness and interlanguage offer insights into the complexities of L2 sound system acquisition. Despite early support, these models have evolved, with critics pointing to challenges in predicting difficulties, suggesting that L2 learners' progress involves an intricate interaction between both their L1 and L2.

Songs as a Multimodal Pedagogical Tools to Teach L2 Pronunciation

In non-English-speaking contexts, music often serves as a primary source of English exposure outside the classroom, making songs a valuable tool for motivating learners and practicing pronunciation. Songs help learners internalize chunks of language fluently, much like how children learn the alphabet or how jingles are easily remembered (Celce-Murcia et al., 2010). They hold significant pedagogical value in phonetic-phonological training, offering various opportunities for pronunciation practice. According to Castelo (2018), they allow teachers to focus on critical areas:

- **Segments:** Selecting songs with frequent occurrences of challenging sounds for targeted practice.
- **Coarticulation and Syllabic Structure:** Using lyrics with complex sound sequences or syllable patterns to train articulation.
- **Word Stress:** Incorporating primary stress placement during the memorization of new words.
- **Rhythm and Intonation:** Highlighting the natural rhythm of the language, although some songs may present additional challenges.

As authentic materials, songs expose learners to varying speech rates, from slow ballads to rapid rap, and serve as clear oral production models readily accessible online. Evidence suggests that songs enhance both speech production and listening comprehension while encouraging repetition, a key factor in improving L2 pronunciation. Their engaging nature often motivates learners to practice independently, reinforcing phonetic habits and promoting sustained improvement (Castelo, 2018).

To maximize their effectiveness, teachers should choose songs that appeal to learners, ideally by their favorite English-speaking artists, and ensure accurate lyrics are available. Songs with slower tempos, simple vocabulary, repetition, and clear stress patterns work best, especially those with conversational rhythms.

Various activities can target specific pronunciation features. For example, learners can practice word stress by matching words to stress patterns, prominence by identifying

or filling in key words, and linking by smoothly transitioning between sounds. Exercises on final consonants, intonation, and reduced speech forms like *gonna* or *wanna* further enhance pronunciation practice (Celce-Murcia et al., 2010). Overall, songs provide a lively and captivating method of teaching and practicing pronunciation in language classrooms.

Studies with Young Learners

Saldıraner and Cinkara (2021) address a recurring challenge in EFL instruction: how to effectively teach pronunciation to young learners. Their study looks on how well songs work to teach pronunciation to young EFL students. The study seeks to understand whether integrating songs can improve pronunciation and boost motivation in young learners more effectively than conventional reading-based instruction. Conducted at a secondary school in southeastern Turkey, the study included 72 students aged 10 to 12, divided into two groups: a song group (n=37) and a reading text group (n=35). They used two primary instruments, the first of which assessed using six texts containing target vocabulary words from the songs used in the instruction. Voice recordings of the students' pre-test and post-test readings were evaluated by two native English speakers, who rated pronunciation quality. Second, to measure motivational and affective engagement, the classroom teacher maintained a diary recording weekly observations of students' interest, enthusiasm, and participation levels during lessons. They came across a statistically significant improvement in pronunciation for the song-based group compared to the text-based group. Specifically, the song group's post-test pronunciation scores were significantly higher. Teacher diaries indicated greater motivation and engagement in the song group, with students actively participating, showing eagerness for upcoming song-based lessons, and enthusiastically completing tasks. In contrast, the text-based group exhibited less engagement, with fewer students consistently participating. Based on the findings, Saldıraner and Cinkara (2021) suggest that EFL instructors consider integrating song-based activities into pronunciation lessons for young learners.

Good, Russo, and Sullivan (2015) address a problem which is the difficulty non-native speakers encounter with English pronunciation. The goal of the study is to determine whether singing along to English vocabulary enhances pronunciation—especially of vowel sounds—better than traditional spoken methods. The study involved 38 Spanish-speaking elementary school students in Ecuador, divided into two groups: one learning through song and the other through rhythmic spoken recitation. Data were

collected through audio recordings of the students' pronunciation, recall, and translation of English phrases. Children's verbal responses were assessed for accuracy in pronunciation, recall of lyrics, and translation of specific vocabulary. Students in the singing group showed significantly better pronunciation of English vowel sounds than those in the spoken group, likely due to melody aiding in memory and articulation. The groups did not, however, significantly differ in how they pronounced consonants (Good et al., 2015).

Džanić and Pejić (2016) investigate the effectiveness of using songs as a pedagogical tool to enhance vocabulary retention and pronunciation in young EFL learners. The primary focus is to assess if songs aid in developing pronunciation features, such as rhythm and intonation, while also increasing students' motivation and positive attitudes toward language learning. The research was conducted with second-grade students aged 7-8 years from a primary school in Bosnia and Herzegovina. The participants were separated into two groups: one exposed to songs with both audio and video support (experimental group) and the other exposed to audio-only songs (control group). Pre-tests, post-tests, and delayed tests were administered focusing on vocabulary retention and pronunciation accuracy. Additionally, a questionnaire was administered to measure students' motivation and attitudes towards using songs in language learning. Quantitative data from the vocabulary and pronunciation tests were analyzed to compare the two groups' performance across different phases of learning. The analysis assessed immediate learning gains, as well as retention over time. Qualitative data from the motivational questionnaire were focusing on students' preferences for song-based learning activities. The findings indicated that songs positively influenced vocabulary retention and pronunciation skills, with both the experimental and control groups showing significant improvements. However, students in the group with video support demonstrated slightly higher engagement and motivation. Overall, the results showed that students found the use of songs enjoyable and motivational, which in turn positively affected their pronunciation learning. Songs, particularly those with repetitive structures and rhythmic elements, were shown to enhance pronunciation skills such as stress, rhythm, and fluency.

The study by Kahraman (2019) investigates the role and significance of songs and music in teaching foreign languages, particularly focusing on their impact on pronunciation and motivation. The study aims to discover the benefits of incorporating

songs in language learning, especially regarding pronunciation improvement and learner motivation, and to provide guidance on how songs can be effectively integrated into lessons. The sample includes fifth-grade French learners from a primary school in Istanbul, using the *Les Loustics A1.1* textbook, which features songs integrated into its chapters. Data were collected by analyzing the *Les Loustics* textbook, observing how the songs were used in lessons, and gathering feedback on their effectiveness as reinforcement tools in language learning. The study involved incorporating songs from the textbook into classroom activities to support pronunciation, vocabulary, and grammar retention. The songs were used as reinforcers, encouraging active participation and improving motivation. The results indicate that songs significantly contribute to enhancing pronunciation and intonation, as well as supporting vocabulary retention. The study suggests that songs can reduce learning anxiety, making lessons more enjoyable and engaging for students.

The possibility of music-based therapies to enhance English pronunciation in students who have English as an Additional Language or Dialect (EAL/D) is investigated by McCormack et al. (2021). The aim of this study is to evaluate how well an eight-week music intervention based on Gordon's Music Learning Theory (MLT) improves EAL/D students' pronunciation. The study was conducted with six EAL/D students, aged six to eight, who were enrolled in a specialized English learning program at a multicultural Australian school. The intervention involved 24 lessons, each lasting 30 minutes, where students engaged in musical activities emphasizing tonal and rhythmic patterns. Songs were alternated weekly to focus either on tonality or rhythm to support internalization of English sounds. The results showed that five of the six participants exhibited notable improvements in pronunciation. Feedback from the teacher corroborated these findings, highlighting enhanced pronunciation confidence and frequent speech improvements. This study indicates that music interventions, particularly those incorporating audiation, hold promise for enhancing EAL/D students' pronunciation skills (McCormack et al., 2021)

The study by Izzah and Sukrisno (2017) examines the effectiveness of using songs compared to dialogues for teaching English pronunciation. The research focuses on whether songs can improve students' ability to pronounce simple English phrases and enhance their engagement in learning. The study involved 48 seventh-grade students from SMP N 17 Pekalongan, Indonesia. The students were divided into two groups: an experimental group (24 students), which used songs as a teaching tool, and a control

group (24 students), which learned through dialogues. The researchers used pre- and post-test recordings to assess pronunciation improvement. The tests focused on ten phrases, and scoring was based on a rubric designed to evaluate pronunciation accuracy. Teacher observation notes supplemented the quantitative data by capturing class dynamics and student behavior. Over the next eight sessions, the experimental group practiced pronunciation using songs, while the control group used dialogues. According to the findings, the experimental group fared better on the post-test than the control group. Students in the song-based group demonstrated significant improvements in pronunciation, particularly in their ability to link words and articulate sounds correctly. Additionally, they exhibited higher levels of enthusiasm and engagement during lessons, as reflected in the teacher's notes. In contrast, the control group showed moderate improvements but struggled with linking words and maintaining consistent pronunciation.

The study by Rais, Pranowo, and Sari (2020) explores the effectiveness of using songs as a teaching tool to improve English pronunciation among third-grade students. By using songs in the teaching process, the study seeks to overcome pronunciation issues, especially those brought on by the students' first language. Indonesian third-graders participated in the study. These students were beginner-level English learners who primarily encountered English within the classroom setting. The researchers used observation checklists and pronunciation tasks, which included both word- and sentence-level exercises. Student progress was evaluated through oral performance, focusing on the accurate pronunciation of vocabulary introduced through the songs. Initially, researchers observed and identified students' difficulties with pronunciation. Then, they implemented song-based lessons, introducing vocabulary through printed lyrics, group singing, and individual pronunciation exercises. The lessons incorporated repetition and interactive tasks to reinforce correct pronunciation. The findings revealed significant improvements in students' pronunciation accuracy and confidence. Even the shyest students actively participated and correctly pronounced vocabulary after repeated practice with songs. Additionally, students demonstrated increased enthusiasm for learning, as the song-based approach created an enjoyable and engaging classroom environment. The study concludes that songs are an effective medium for improving English pronunciation and boosting students' confidence in oral performance.

Studies with Adolescents

Wodecki (2014) draws attention to the difficulty of using efficient pronunciation instruction strategies in young adolescents' EFL classes. By focusing on how songs may aid in pronunciation skills, especially aspects like stress, intonation, and rhythm, the research aims to explore whether pop songs can make pronunciation practice more engaging and effective for students. The study involved lower secondary school students aged 11-15 from the Czech Republic, focusing on a specific group of students who generally show enthusiasm for pop music, which makes this genre a potentially strong motivational tool.

The research relied on two main data collection tools: a set of twelve listening worksheets based on pop songs and a survey among EFL teachers. The worksheets were designed to emphasize pronunciation skills, specifically individual sounds and linking. Students' pronunciation was recorded before and after the tasks. Additionally, an anonymous questionnaire was distributed among EFL teachers to understand their current practices, attitudes toward pronunciation, and opinions on song-based activities. The students' pronunciation recordings were analyzed to determine improvement in pronunciation features such as individual sounds and linking. The analysis revealed that students who engaged in song-based tasks showed noticeable improvement in certain pronunciation features, particularly in rhythm and stress. The survey results indicated that most EFL teachers value pronunciation and frequently use songs as an instructional tool, yet they often limit pronunciation practice to sounds rather than integrating other aspects. Teachers also generally perceived songs as a motivational tool that could engage students and make pronunciation practice less monotonous.

The study by Baills et al. (2021) looks into the effect of listening to songs and singing on second language (L2) pronunciation and vocabulary acquisition in the early phases of learning. It aims to clarify the effectiveness of listening to songs versus rhythmic speech and to examine if singing provides additional benefits over song listening alone. The participants were 108 Mandarin-speaking students with no prior knowledge of French, studying at high schools and a university in China. They were divided into groups based on musical abilities to compare the effects of rhythmic speech listening, song listening, and singing. Pronunciation improvement was assessed with accentedness ratings from native French speakers. Additional assessments, such as musical and working memory tests, evaluated individual differences. The study used

general linear mixed models to analyze accentedness scores. Regression models assessed the influence of individual factors, including musical experience and working memory, on outcomes. Findings indicate that listening to songs improved pronunciation more than rhythmic speech alone. However, singing did not significantly outperform listening in pronunciation improvement. No notable difference was observed in vocabulary recall between groups.

Zhang, Baills, and Prieto's another study (2023) addresses the gap in effective methodologies for teaching L2 pronunciation and vocabulary, particularly focusing on adolescent ESL learners. The authors aimed to discover the efficacy of a song-based training approach compared to a speech recitation approach in improving English vocabulary acquisition and pronunciation among adolescent Chinese ESL learners. The research evaluates the performance of students trained using songs with familiar tunes against those exposed to rhythmic spoken recitation, both groups learning the same English song lyrics. The research involved a sample of 95 eighth-grade Chinese students, with an average age of 14, from China. The students, all monolingual Mandarin speakers with basic to low-intermediate English proficiency, were assigned to one of two groups: the "singing" group or the "speech" group. The singing group learned English lyrics set to familiar Chinese pop melodies, while the speech group learned the same lyrics through a structured recitation format. Data collection for this study comprised several standardized instruments. Pronunciation gains were evaluated using a word oral-reading task and a sentence oral-reading task, with native English speakers rating participants' pronunciation for accentedness, comprehensibility, fluency, and segmental and suprasegmental accuracy. In addition to these primary measures, the study employed control measures, including a written vocabulary test, working memory assessment, speech imitation skills, and music perception ability, to ensure that variations in these skills did not skew the findings. Findings indicated that while both training approaches led to improvements in vocabulary and pronunciation, the singing group outperformed the speech group on both measures. For pronunciation, ratings across multiple dimensions—including accentedness, fluency, and both segmental and suprasegmental accuracy—were higher for the singing group than for the speech group. These findings support the notion that singing, particularly with familiar melodies, can facilitate enhanced memory encoding and retrieval, likely due to the reinforcement provided by rhythmic and melodic patterns in familiar songs.

Studies with Adults

The study by Habboushi (1998) explores the effectiveness of rap songs in improving pronunciation for Arab students learning English, with a focus on problematic phonemes. The study's purpose is to assess whether rap songs can enhance the pronunciation of English phonemes /θ/ and /ð/ among Arab students, compared to traditional methods like minimal pair drills. It also examines if rap songs increase student motivation and engagement. The sample includes 34 students from the University of Balamand in Lebanon, divided into an experimental group, which used rap songs, and a control group, which practiced minimal pairs. Data were collected through pre- and post-tests, which included reading sentences with the target phonemes, and a questionnaire for the experimental group to gauge their attitudes toward using rap in learning pronunciation. The experimental group engaged in daily 25-30 minute rap sessions over eight days, focusing on lyrics containing the target phonemes. The control group practiced with minimal pairs and sentence drills. Results showed that the control group performed better than the experimental group in pronunciation improvement. However, the questionnaire revealed that students in the rap group enjoyed the sessions and reported higher motivation levels. This study highlights rap as a motivating but less effective tool for pronunciation improvement compared to traditional drills.

A thesis study of Harold Mozell (2002) aimed to explore the effect of American English songs on the pronunciation skills of adult second language learners centering on vowel and consonant articulation beside suprasegmental features such as stress and rhythm. The research investigated whether singing could improve learners' pronunciation by reinforcing accurate phonological patterns. The study was conducted with 50 adult Spanish-speaking ESL learners from California. Participants were selected from various proficiency levels ranging from beginning low to advanced. The study also included a reverse control group (RCG) to test the sequencing of singing and reading tasks. The primary data collection tools were audio recordings of participants reading and singing sections of the song *Do Wah Ditty Ditty*. The recordings were analyzed to assess pronunciation accuracy across three target areas: vowel distinctions ([I] vs. [i]), consonant articulation ([r] vs. [t]), and suprasegmental features, such as stress placement.

Participants underwent a four-stage procedure. Firstly, participants read the song text aloud. Secondly, after hearing a modeled reading, they repeated the phrases. Thirdly, participants sang the song following a modeled singing session. Lastly, participants read

the text independently again to assess retention. A reverse control group (RCG) followed a modified sequence, with singing preceding the repeat reading stage, to evaluate whether singing had a direct effect on pronunciation gains. The study found mixed outcomes regarding the impact of singing on pronunciation. While participants generally improved during the singing stage, their pronunciation reverted to earlier patterns during the final reading. The analysis of vowel ([I] vs. [i]) and consonant ([r] vs. [t]) distinctions showed limited sustained improvement directly attributable to singing. Suprasegmental analysis revealed better stress placement during the singing phase, but the gains were not consistently retained in subsequent readings. These results suggest that while singing can serve as a reinforcement tool, its direct effect on pronunciation acquisition may be limited without additional scaffolded instruction. The study highlights the potential of songs as a supplementary tool for improving pronunciation, particularly in engaging students and reinforcing phonological patterns. However, it emphasizes that songs should be integrated within a broader instructional framework that includes explicit pronunciation training.

Bjorklund (2002) investigates the application of music in English as a Second Language (ESL) classrooms, especially for teaching pronunciation and oral skills. The problem identified is the challenge of teaching ESL students effective pronunciation and oral fluency. The study aims to determine if music, especially through singing and rhythm-based activities, aids in enhancing pronunciation and speaking skills among adult learners. The sample consists of adult international students enrolled in ESL programs at the University of Wyoming and other institutions. Both students and instructors participated in surveys to provide insights into the use of music in language instruction. Data were collected through surveys distributed to both ESL instructors and students. The surveys included questions on the frequency and methods of music usage for teaching pronunciation, stress, intonation, and overall speaking skills, as well as perceptions of its effectiveness. Results indicate that many instructors incorporate music into their teaching and observe improvements in students' pronunciation, especially in areas like stress and intonation. Additionally, students reported that music helped them feel more confident in their pronunciation.

The study by Rengifo (2009) explores the use of karaoke as a method to improve English pronunciation among adult learners in a classroom setting. The study aims to determine the effectiveness of karaoke activities in enhancing pronunciation skills in order to help students solve common pronunciation problems that affect their confidence

and comprehension in English. Participants included a group of adult students at an English language institute, with diverse backgrounds and motivations for learning English. The research used various qualitative tools like interviews, video recordings, and teacher diaries, to track student progress, observe participation, and collect feedback on the karaoke activities. Throughout the intervention, karaoke sessions were implemented where students sang English songs while following lyrics. The sessions included pre-activity discussions, pronunciation practice, and exercises focusing on sounds and phonetic patterns. Students reflected their performance and received feedback to improve pronunciation over time. The results indicated that karaoke effectively boosted confidence and pronunciation accuracy, especially with vowel sounds and rhythm. Students found the sessions enjoyable and engaging which leads to increased motivation and reduced speaking anxiety. All in all, this study shows how karaoke can be an enjoyable and effective tool for language instruction for improving pronunciation skills in an ESL context.

Sağlam (2010) investigates the impact of music on the speaking fluency and motivation of adult EFL learners. It examines whether integrating songs into the speaking curriculum can enhance learners' fluency in English pronunciation and overall speaking proficiency. The study also explores how music influences students' motivation and interest levels in learning English. The research involved 46 pre-intermediate adult EFL learners at the School of Basic English at Karadeniz Technical University. The participants were divided into two groups: a treatment group that engaged in music-based speaking activities and a contrast group that received traditional speaking instruction without music. The study employed multiple data collection tools; oral assessments to measure participants' speaking fluency and pronunciation, questionnaires by which students' motivation and interest levels were assessed and teacher interviews and student reflections. Qualitative data were gathered through interviews with the teacher and student reflections, providing insights into their perceptions of music-based lessons. Throughout 6 weeks, both groups followed the same curriculum, but the treatment group involved music into their speaking exercises using specific English songs. Each session involved listening to, practicing, and performing songs to develop pronunciation patterns and fluency. The contrast group practiced speaking using traditional methods like dialogues and discussions. At the end of the treatment, both groups underwent post-tests to measure changes in fluency and motivation. The treatment group showed significant

improvement in oral fluency and pronunciation, particularly in suprasegmental features such as rhythm and stress. While the contrast group also improved, their progress was less pronounced. Although both groups experienced a decrease in motivation over time, the treatment group's decline was notably smaller. Students in the music-based group reported higher levels of enjoyment and engagement, attributing their improved pronunciation to the repetitive and rhythmic nature of the songs. The study concludes that music and songs can effectively enhance pronunciation and speaking fluency in adult EFL learners. It also underlines the motivational benefits of integrating music into language instruction.

In her thesis, Durand (2019) aims to investigate the use of songs as instructional materials in adult ESL classrooms, with a particular focus on teachers' decision-making processes. The research explores how songs are selected, integrated, and perceived as tools for language learning, specifically examining their potential to support linguistic objectives such as pronunciation, vocabulary acquisition, and grammar. The study was conducted at a university-level Intensive English Program (IEP) in the Midwestern United States. The sample consisted of 12 experienced ESL instructors who participated in a survey and five focal participants who were interviewed in-depth. She utilized survey, to gather data on teachers' practices, beliefs, and the frequency of song use in their classrooms, and interviews with five focal participants to capture insights into their decision-making processes. The findings revealed that songs were frequently used in intermediate-level classes, often for teaching vocabulary, grammar, and pronunciation. Teachers reported selecting songs based on student preferences, relevance, and content. However, their use was often constrained by time and the labor-intensive nature of preparing song-based lessons. Teachers perceived songs as effective for enhancing student motivation and engagement, as well as for improving pronunciation features such as rhythm, stress, and intonation. Despite these benefits, some expressed doubts about the long-term impact of songs on language acquisition.

The study by Jackson (2019) investigates the potential of using karaoke as a pedagogical tool to improve pronunciation in English as a Foreign Language (EFL) settings. It aims to evaluate how karaoke, specifically classroom karaoke lessons, can enhance learners' phonological skills, focusing on both segmental features (e.g., sounds of /l/, /r/, /dʒ/) and suprasegmental features (e.g., word stress, intonation, and blending).

The participants included five adult Japanese learners of English from a private language school in Japan. They ranged in age from 30 to 55 and had varying proficiency levels.

The research utilized pre- and post-tests, rubrics for recorded readings, journals and interviews. The study spanned six weeks. Initially, participants completed pre-tests to assess their baseline pronunciation skills. Weekly karaoke lessons focused on specific pronunciation targets. During each session, students engaged in listening, singing, and guided practice using selected songs. Post-tests were administered at the end of the course to measure improvements. Results indicated notable improvements in students' perception of spoken English, particularly in distinguishing challenging phonemes and improving word stress. Pronunciation production showed varied results. Some participants demonstrated marked progress in blending and intonation, while others showed limited gains in segmental features like /r/ and /l/ sounds. It also revealed that participants found karaoke lessons enjoyable and engaging, which helped reduce their speaking anxiety and increased their willingness to practice. Both students and the teacher perceived karaoke as a useful tool for improving fluency and rhythm in spoken English. The study concluded that classroom karaoke holds promise as a supplementary tool for teaching pronunciation in EFL contexts. It creates a low-pressure, interactive environment conducive to language learning.

Vukićević and Ćirković-Miladinović (2023) investigate the use of instructive musical exercises to improve English pronunciation among university students. They center on enhancing the pronunciation of sentences, including questions, affirmative sentences with adjuncts, and if-clauses. The research involved 45 first-year undergraduate students from Serbia. The primary data collection tools included pre- and post-intervention oral recordings of students reading sentences aloud. These recordings were analyzed for improvements in pronunciation elements such as intonation, rhythm, pitch, and stress. The study was conducted over three weeks as part of regular English language lessons. Students participated in musical exercises designed specifically for the research, where melodies were composed to match the intonation patterns of the target sentences. The exercises were divided into two tasks: singing sentences with text and recognizing sentences through melodies without lyrics. After the training, participants were re-tested to measure improvements. The findings indicated significant improvements in pronunciation. Most students demonstrated better intonation, more accurate rhythm, and improved pitch in their post-intervention recordings. 92% of students improved their

pronunciation of questions, while 89% and 95% showed progress in tag questions and if-clauses, respectively. These results highlight the effectiveness of musical exercises in addressing specific pronunciation challenges. The study concludes that music-based exercises can effectively enhance pronunciation skills in EFL learners, particularly by improving their fluency, intonation, and rhythm.

In his study, Robinson (2024) explores the use of songs in English for Specific Purposes (ESP) courses, aiming to enhance vocabulary, pronunciation, and engagement among university students in Italy. The purpose is to investigate whether integrating popular songs into ESP lessons can effectively aid in language learning, particularly by focusing on pronunciation and motivation. Participants included postgraduate students at the University of Calabria. Data were collected through questionnaires completed by students after the course. The questionnaire captured students' perceptions of the effectiveness of song-based activities on language skills, including pronunciation. The study incorporated 19 songs into ESP lessons over a 42-hour course, with each song linked to language tasks such as gap-fill, discussions, and grammar exercises. Songs were chosen to align with lesson topics, aiming to introduce new vocabulary, support listening comprehension, and facilitate pronunciation practice. Results indicated that the majority of students found song activities helpful for improving pronunciation and learning vocabulary. They reported enhanced engagement and enjoyment, suggesting that songs provided a motivational learning tool for ESP. This study emphasizes the potential of songs as a multifaceted resource in ESP classes, contributing to pronunciation and overall language learning.

Pronunciation Learning Strategies

Independent language learning represents a shift towards learner autonomy, emphasizing choice, control, and responsibility (White, 2008). This approach moves beyond traditional teacher-led environments, advocating for learners to develop agency and self-regulation. It encompasses three key dimensions: the context of learning free from direct teacher mediation, a philosophy fostering independence as both a process and a goal, and the attributes learners bring, including metacognitive strategies and self-awareness. The concept of independence is complex, often requiring learners to build a meaningful interface between their goals and the learning environment. This process involves adapting strategies to specific contexts, whether in natural immersion settings or structured distance-learning scenarios. Effective strategy use, such as affective regulation,

metacognitive reflection, and creative engagement, enables learners to overcome challenges and optimize their learning experiences (White, 2008).

Enhancing second-language speaking skills in independent learning environments focuses on developing pragmatic abilities, which encompass the capacity to interpret and produce speech acts appropriately within specific sociocultural contexts (Cohen, 2008). Pragmatics involves understanding implied meanings, speaker intentions, and the appropriate use of speech acts such as apologizing, requesting, or refusing (Borer, 2018). Effective communication relies on learners' ability to adapt to cultural norms and linguistic conventions, which often require explicit instruction and practice. Key strategies for pragmatic development include learning the structure and use of speech acts, practicing through simulated or real interactions, and engaging in reflective evaluations of performance. Instructional approaches informed by empirical research prioritize contextualized learning and strategy use, integrating feedback and technology to support learners (Borer, 2018). Technological tools, including websites and virtual environments, provide innovative platforms for practicing pragmatics. These resources allow learners to engage with realistic scenarios, interact with native speakers, and receive targeted feedback. By leveraging such tools, learners can develop both the linguistic and sociocultural competencies necessary for effective communication in the target language (Cohen, 2008).

Pronunciation Learning Strategies (PLS) refer to conscious actions and techniques used by learners to improve their pronunciation in a structured and reflective manner (Szyszka, 2017). They involve both broader plans and specific tactics aimed at enhancing learning outcomes and controlling pronunciation use. PLS encompass strategies for improving sound accuracy, intonation, stress, and overall communication skills. Several typologies categorize PLS into groups such as cognitive, metacognitive, social, and affective strategies. These include techniques like repeating sounds, analyzing speech patterns, setting goals, self-evaluating progress, seeking feedback, and using memory aids (Tabanlıoğlu, 2003). Some classifications also highlight the importance of practical approaches, like listening to authentic speech or imitating native speakers, combined with analytical methods, such as using phonetic symbols or forming pronunciation hypotheses. Despite varying approaches, these strategies collectively emphasize the need for active and intentional practice to improve second-language pronunciation.

METHODOLOGY

In this section, the research model, population and sample, data collection tools, data collection process and statistical methods and techniques used in data analysis are explained.

Research Model

This study utilized a mixed-methods research design, which systematically combines both quantitative and qualitative data to offer a more comprehensive understanding of the research problem than either method alone (Creswell and Guetterman, 2019; Dörnyei, 2007). Specifically, a quasi-experimental approach was adopted, which integrates experimental elements despite limited control over variables (Campbell and Stanley, 1963). Quasi-experiments are particularly suitable when participants cannot be randomly assigned (Creswell, 2009). An interrupted time-series design was used, incorporating 12 interventions and 5 measurements taken at intervals throughout the study. This design, as described by Creswell and Guetterman (2019), is ideal for tracking changes over time by comparing pre- and post-intervention performance. Dörnyei (2007) emphasizes the suitability of time-series analysis for small samples, as it relies on repeated measurements rather than large participant pools.

This method was particularly appropriate for investigating the effects of songs on adolescent learners' pronunciation. The longitudinal approach captured patterns of change in individual participants' pronunciation across multiple time points, enabling a detailed exploration of the intervention's effects. Teacher's notes, serving as an example of qualitative research design, complemented the quantitative data by providing insights into students' pronunciation challenges and progress.

Population and Sample

The participants of the study were 7 high school students studying at a Multi-Program Anatolian High School located in a small town in Central Black Sea region. The participants whose ages range from 17 to 18, were in the 12th grade and were following the math-science track. They took four English lessons weekly and had similar backgrounds in foreign language learning since they started learning English in the 2nd grade. However, they did not have an opportunity in order to develop their English proficiency except having limited number of classes. It's two classes in a week in primary schools and three or four lessons in a week in secondary schools. It continues as four

classes in a week in high school (MoNE, 2018). They expressed they had never use any additional resources for learning English before or during the intervention. English songs, specifically, were quite unfamiliar to them; they were neither exposed to them in an English lesson nor listened to them outside of class.

In this research investigating pronunciation development of adolescent learners by using songs in the classroom, the researcher employed convenience sampling by selecting participants primarily based on their willingness and availability. As Cohen et al. (2018) describe, this approach not only simplifies the recruitment process but also facilitates more efficient data collection, allowing the researcher to focus on gathering valuable insights without the complexities associated with more rigorous sampling methods.

By choosing seven 12th-grade participants who were readily available and eager to engage in the study, the researcher was able to quickly assemble a group conducive to examining pronunciation development. While this sample size is small, convenience sampling offers the advantage of access to a population that may be difficult to reach through traditional sampling methods. It allows researchers to conduct studies in real-world settings and gather immediate feedback from participants, which can be particularly beneficial in educational research (Etikan et al., 2016).

Data Collection Tools

The researcher applied measurements during the application period in order to investigate the effects of songs on students' pronunciation. For this purpose, the pronunciation section of the A2 level speaking assessment rubric obtained from Cambridge University Press (2019) was utilized to evaluate the students' pre- and post-pronunciation performances. The A2 Key Speaking assessment rubric, developed by Cambridge, serves as a tool to evaluate candidates taking the A2 Key (KET) and A2 Key for Schools exams. These exams assess English learners at an elementary level, focusing on their ability to engage in basic communication. The rubric is applied in both official assessments and classroom practice to measure candidates' proficiency in Grammar and Vocabulary, Pronunciation, and Interactive Communication. Its primary purpose is to provide standardized, reliable, and valid evaluations of speaking performance. For both teachers and examiners, the rubric provides structured feedback, helping learners

understand their strengths and areas for improvement before taking the official exam (Cambridge English, 2019).

Cambridge Assessment English ensures the reliability and validity of the speaking assessment rubric through ongoing research and statistical methods. Reliability is achieved by maintaining consistency across different examiners and test situations, while validity is ensured through alignment with real-life communication needs (Luoma, 2010). This ensures that the rubric effectively measures the language skills it is intended to assess, making it a valuable tool in both formative and summative assessments. The rubric which is used as data collection tool is shown in Figure 1.

Pronunciation	
Are the utterances mostly clear? Can the speaker be mostly understood?	
Good:	Not so good:
Does the speaker show limited control of intonation?	
Good:	Not so good:
Does the speaker show limited control of word and sentence stress?	
Good:	Not so good:
Are individual sounds mostly clear?	
Good:	Not so good:
Comments:	

Figure 1. Rubric used to assess pronunciation performance

These questions align with the research objectives, as the researcher aims to evaluate four main aspects of the students' pronunciation: intelligibility, clarity,

intonation control, and control of word and sentence stress. To ensure the results are more analyzable, these factors are assessed using a 1-5 scoring scale. The scoring criteria is represented as below.

1. Utterance Clarity and Comprehensibility

Score of 5: Utterances are consistently clear, and the speaker is fully understandable without effort.

Score of 4: Utterances are generally clear, with only minor lapses that do not hinder understanding.

Score of 3: Utterances are somewhat clear but include noticeable lapses, requiring some effort to understand.

Score of 2: Utterances are often unclear, with frequent issues that make comprehension challenging.

Score of 1: Utterances are mostly unclear, and the speaker is very difficult to understand.

2. Control of Intonation

Score of 5: The speaker demonstrates excellent control of intonation.

Score of 4: The speaker shows good control of intonation, though occasional inconsistencies may occur.

Score of 3: The speaker has moderate control over intonation but displays frequent errors or monotony.

Score of 2: The speaker shows limited control over intonation, often using flat or incorrect patterns.

Score of 1: The speaker has almost no control over intonation, making speech flat or unnatural.

3. Control of Word and Sentence Stress

Score of 5: Stress is accurate and natural throughout, enhancing overall pronunciation.

Score of 4: Stress is mostly accurate, with occasional minor mistakes that do not hinder intelligibility.

Score of 3: Stress is inconsistent, with frequent errors that occasionally affect the natural flow of speech.

Score of 2: Stress is mostly inaccurate, with errors that often result in unnatural or unclear speech.

Score of 1: Stress is rarely accurate, with major issues that make speech difficult to understand.

4. Clarity of Individual Sounds

Score of 5: Individual sounds are consistently clear and accurate, contributing to excellent pronunciation.

Score of 4: Most individual sounds are clear and correct, with occasional errors that do not hinder comprehension.

Score of 3: Many individual sounds are correct, but errors are frequent enough to be noticeable.

Score of 2: Individual sounds are often unclear or incorrect, significantly impacting the quality of pronunciation.

Score of 1: Individual sounds are rarely clear or accurate, making speech very difficult to understand.

In addition to assigning scores from 1 to 5 for each aspect of pronunciation, the researcher also provided qualitative feedback by taking notes about the students' utterances. These notes aimed to capture specific observations that could not be fully conveyed through numerical scores. For example, the researcher noted particular sounds, words, or phrases that were challenging for the students, as well as instances of improvement or consistent errors in pronunciation.

This qualitative feedback enriched the assessment by offering deeper insights into individual performance, highlighting areas of strength and specific difficulties. These notes provided valuable context for understanding the scores and helped inform targeted instructional strategies during the intervention.

Data Collection Process

In the data collection process, a longitudinal study was conducted with seven students across 12 sessions. Each session incorporated a song-based lesson, utilizing

songs selected to align with the students' age and language comprehension levels. The songs used included: Flowers by Miley Cyrus, Until I Found You by Stephen Sanchez, Lush Life by Zara Larsson, As It Was by Harry Styles, Closer by The Chainsmokers, Sugar by Maroon 5, Unwritten by Natasha Bedingfield, Better When I'm Dancing by Meghan Trainor, Counting Stars by OneRepublic, Can't Stop the Feeling by Justin Timberlake, Don't Stop Me Now by Queen, and Shake It Off by Taylor Swift.

Intervention

Each session involved specific activities based on the selected song. These included listen and repeat exercises, consonant and vowel drills, stress and intonation practice, and sound chart activities. The pronunciation practice activities outlined below were implemented as part of the intervention to facilitate the improvement of pronunciation skills in the participants.

Song Activities

1. Flowers - Miley Cyrus

Focus: Final /s/ sounds, diphthongs, and rhythm

1. Listen and Repeat:

- Play the chorus and ask students to focus on the final /s/ sound in words like *flowers* and *hours*.
- Repeat each line after listening, exaggerating the /s/ sound.

2. Identify the Diphthongs:

- Highlight words like *mine*, *crying*, and *fine*.
- Students should circle the diphthongs and practice pronouncing them.

3. Clap the Rhythm:

- Students clap along to the rhythm of the chorus while speaking the lyrics. This helps connect stress with rhythm.

2. Until I Found You - Stephen Sanchez

Focus: Vowel contrasts and linking sounds

1. Vowel Match Game:

- Provide pairs of words from the song (e.g., *you* - *knew*, *found* - *ground*).

- Ask students to practice pronouncing and identifying the vowel differences.

2. Linking Practice:

- Play a line from the song where words are connected, such as *Until I found you*.
- Pause after each line and have students repeat with correct linking (connecting *I* and *found*).

3. Stress Patterns:

- Write lines like *Heaven, when I held you again*.
- Ask students to underline the stressed syllables and practice saying the line with the correct rhythm.

3. Lush Life - Zara Larsson

Focus: Silent letters and consonant clusters

1. Spot the Silent Letter:

- Identify words like *walked* or *half* where some letters are silent.
- Practice pronouncing these words with correct articulation.

2. Consonant Cluster Drill:

- Highlight words with clusters, like *life*, *stop*, or *sparkle*.
- Practice saying them slowly and then at normal speed.

3. Sing with Expression:

- Focus on a verse and ask students to sing with exaggerated intonation, paying attention to sentence stress.

4. Don't Stop Me Now - Queen

Focus: Intonation and stress in fast-paced lyrics

1. Intonation Mapping:

- Write down a verse and use arrows to indicate rising and falling intonation.
- Students practice singing the verse while following the arrows.

2. Stress the Right Words:

- Ask students to underline content words in the chorus (e.g., *don't*, *stop*, *now*).
- Practice singing only the underlined words to emphasize stress.

3. Tongue Twister Challenge:

- Pick a fast-paced line like *I'm burning through the sky, yeah!*
- Ask students to say it three times faster each time to improve fluency.

5. As It Was - Harry Styles

Focus: Word stress and vowel length

1. Stress the Right Syllable:

- Write words from the song like *was*, *past*, *love*, and *hold*.
- Have students identify which syllable is stressed in each word. Practice saying each word with correct stress.

2. Vowel Length Practice:

- Focus on vowel length with words like *past* (/æ/ sound) and *hold* (/oo/ sound).
- Have students compare these vowel sounds by saying them aloud and emphasizing the differences.

3. Sound Chart Activity:

- Teacher writes the vowel sound “/oo/” in a square.
- Students complete the chart with words like *hold*, *old*, *so*, and *go*.

4. Sing and Stress Practice:

- Choose a line like *As it was, As it was*.
- Students practice singing it, paying attention to the correct rhythm and stress of the words.

6. Closer - The Chainsmokers

Focus: Consonant clusters and linking

1. Consonant Cluster Drill:

- Focus on words with clusters like *closer*, *world*, and *night*.
- Have students practice these clusters slowly and then at normal speed.

2. Linking Sounds:

- Focus on linking sounds in phrases like *closer to* and *don't you* (the "t" and "y" sounds blend).
- Students repeat the phrases and practice the linked sounds.

3. Sound Chart Activity:

- Teacher writes the consonant cluster “/st/” in a square.
- Students complete the chart with words like *closer*, *stop*, *best*, and *fast*.

4. Pronunciation Practice:

- Write the sentence *I don't know, I just want to stay* and ask students to practice pronouncing the linking sounds and reducing unstressed words (like *don't* and *to*).

7. Sugar - Maroon 5

Focus: Consonant endings and /ʌ/ vowel sound

1. Consonant Ending Focus:

- Identify words like *sugar*, *love*, *heart*.
- Have students practice pronouncing the final consonants clearly, particularly the *r* sound in “sugar.”

2. /ʌ/ Vowel Sound Practice:

- Focus on words like *sugar*, *love*, and *up*.
- Have students compare these words and practice the short “u” sound (/ʌ/).

3. Sound Chart Activity:

- Teacher writes the vowel sound “/ʌ/” in a square.
- Students complete the chart with words like *sugar*, *love*, *run*, and *cut*.

4. Clapping to the Beat:

- Play the chorus and ask students to clap the beat while singing, focusing on stressing the first syllables of the important words.

8. Unwritten - Natasha Bedingfield

Focus: Word stress and intonation

1. Stress and Intonation Practice:

- Choose a phrase like “*Live your life with arms wide open.*”
- Have students underline stressed words and practice the melody and rhythm.

2. Silent Letters and Pronunciation:

- Focus on words like *unwritten*, where the *t* is barely pronounced, and *life*.
- Students practice pronouncing the silent *t* and other tricky sounds.

3. Sound Chart Activity:

- Teacher writes the consonant sound “/t/” in a square.
- Students complete the chart with words like *unwritten*, *but*, *life*, and *start*.

4. Vowel Sound Identification:

- Focus on the long vowels in *life*, *wide*, and *open*.
- Ask students to circle words with the same vowel sounds and practice saying them.

9. Better When I’m Dancing - Meghan Trainor

Focus: Plosives and /æ/ vowel sound

1. Plosive Practice:

- Focus on plosives like *better*, *dancing*, and *day*.
- Have students say these words slowly, emphasizing the popping *b*, *d*, and *t* sounds.

2. /æ/ Vowel Sound Drill:

- Focus on words like *dancing*, *back*, and *laugh*.
- Have students practice the short “a” vowel sound (/æ/) in these words.

3. Sound Chart Activity:

- Teacher writes the vowel sound “/æ/” in a square.
- Students complete the chart with words like *dancing*, *back*, *laugh*, and *cat*.

4. Singing and Stress Practice:

- Focus on the phrase “*I’m better when I’m dancing.*”
- Have students practice singing it while placing emphasis on the important content words like *better* and *dancing*.

10. Counting Stars - OneRepublic

Focus: Syllable stress and diphthongs

1. Syllable Stress:

- Focus on words like *counting*, *stars*, *gold*.
- Have students practice saying these words with the correct stress on the first syllable.

2. Diphthong Practice:

- Focus on words like *stars*, *fire*, and *time*.
- Have students practice the diphthong sounds, especially in the words *fire* (/aɪə/) and *time* (/aɪ/).

3. Sound Chart Activity:

- Teacher writes the diphthong “/aɪ/” in a square.
- Students complete the chart with words like *stars*, *fire*, *time*, and *high*.

4. Rhythm Practice:

- Ask students to clap to the rhythm of the chorus while singing the lyrics. Focus on ensuring the stressed syllables are pronounced in time with the beat.

11. Can’t Stop the Feeling - Justin Timberlake

Focus: Final sounds and vowel reductions

1. Final Consonant Focus:

- Practice final sounds in words like *feeling*, *dancing*, and *turning*.
- Have students pronounce these words with clear final sounds, especially the *ng* in *feeling*.

2. Vowel Reduction Practice:

- Focus on reduced vowels in words like *can't*, *the*, and *feeling*.
- Have students practice reducing unstressed vowels and saying the phrases naturally.

3. Sound Chart Activity:

- Teacher writes the sound “/ŋ/” (as in *ng* in *feeling*) in a square.
- Students complete the chart with words like *feeling*, *singing*, *long*, and *song*.

4. Pronunciation Relay:

- In pairs, students take turns saying the lines from the song with correct pronunciation, focusing on rhythm and final consonants.

12. Shake It Off - Taylor Swift

Focus: Consonant endings and linking sounds

1. Consonant Ending Drill:

- Focus on the final consonants in words like *shake*, *off*, *heart*, and *hard*.
- Have students pronounce these words with clear endings.

2. Linking Sound Practice:

- Focus on linking in phrases like *shake it off*, where “it” and “off” are linked.
- Students repeat the phrases, linking the final and initial sounds smoothly.

3. Sound Chart Activity:

- Teacher writes the consonant sound “/ʃ/” (as in *shake*) in a square.
- Students complete the chart with words like *shake*, *she*, *ship*, and *sharp*.

4. Stress and Rhythm Practice:

- Focus on the line “*And the players gonna play, play, play.*”
- Students practice saying it with the correct stress on the content words and the rhythm of the song.

Administration of Pre-test and Post-test Assessments

Prior to the intervention, a pre-test was administered to assess students' pronunciation using a standardized rubric. The test required students to read an A2-level text retrieved from the British Council's LearnEnglish website (<https://learnenglish.britishcouncil.org/skills/reading/a2-reading>). The decision to use A2-level texts was based on the results of a prior level test, which indicated that this level was appropriate for the learners' proficiency. The full texts used in the pre-test and post-test are provided in the appendix. During the intervention, five assessments were conducted, including the initial pre-test and four post-tests. For each assessment, students read different A2-level texts to evaluate their pronunciation progress over time. Since the focus of the research was on pronunciation rather than broader speaking skills, each student read A2-level English texts aloud, which were recorded for further analysis. Besides scoring the pre-test and post-tests, the teacher documented observations considered significant, including common pronunciation errors and instances of unexpected accuracy. An external rater, in addition to the researcher, independently evaluated the students' recordings. The external rater, who holds expertise in English language teaching and has relevant experience in language assessment, utilized a standardized 1-5 scale to assess pronunciation based on specific criteria outlined in the study's rubric. This structured approach ensured consistency in the assessment process and facilitated the analysis of students' pronunciation development across multiple time points.

Data Analysis

The data analysis was conducted using SPSS to assess the four components outlined in the pronunciation rubric. Initially, a normality test was performed to examine the distribution of the data for each of the components. Following the normality assessment, a Repeated Measures ANOVA was conducted to analyze the changes in pronunciation scores across the five assessment points. This statistical approach allowed for the evaluation of within-subject variations in pronunciation over time, accounting for the repeated measurements at multiple intervals. For data that did not meet the assumption of normality in other research questions, the Friedman Test was utilized. Additionally,

multiple comparison analyses using the Wilcoxon Signed-Rank Test were performed to examine significant differences between groups. The qualitative data collected by the researcher during the implementation were analyzed using the descriptive analysis method. Descriptive analysis complements causal research by providing context, identifying key population characteristics, and aiding in the interpretation of findings. It is crucial for planning interventions, understanding treatment variations, and prioritizing hypotheses consistent with observed realities (Loeb et al., 2017).



FINDINGS AND DISCUSSION

First Research Question

The first research question of the study is "Do English lessons with songs have a significant effect on students' English pronunciation skills?". The effects of English lessons supported by songs on students' pronunciation skills were examined. Before the analysis of the data, normality assumption tests were used and evaluated in Table 1.

Table 1. Normality Test Results of the First Research Question

Measurement	Kolmogorov-Smirnov (p)	Shapiro-Wilk (p)
Pre-Test	0.200	0.609
Post-Test 1	0.200	0.609
Post-Test 2	0.149	0.262
Post-Test 3	0.200	0.203
Post-Test 4	0.200	0.123

When Table 1 was examined, it was observed that the data exhibited a normal distribution. This conclusion was supported by statistical test results, numerical indicators, and graphical evaluations, all confirming the appropriateness of the data for further analysis ($p > 0.05$). Since the assumption of normality was provided, one-way analysis of variance (Repeated Measures ANOVA Test) was applied for repeated measures in order to evaluate whether there were significant differences in the English pronunciation skills of the students in English lessons with songs. The findings regarding the test results are presented in Table 2 below.

Table 2. Repeated Measures ANOVA Test Results

Mauchly's Sphericity Test		Within-Subjects Effects			Within-Subjects Contrasts		
Mauchly's W	p	F(4,24)	p	η^2	F(1,6)	p	η^2
0.022	0.067	15.202	0.000	0.717	26.226	0.002	0.814

When Table 2 is examined, it is evident that the sphericity assumption is not violated ($p > 0.05$); therefore, interpretations can be made based on the sphericity-assumed values. Within-Subjects Effects show that the mean scores of the measurements have changed significantly over time and the effect size is very high ($\eta^2 > 0.70$). This situation provides strong evidence that English lessons with songs improve students' pronunciation skills. According to Within-Subjects Contrasts, quadratic, cubic and higher order effects were not found to be significant, while a linear increase in pronunciation skills was concluded.

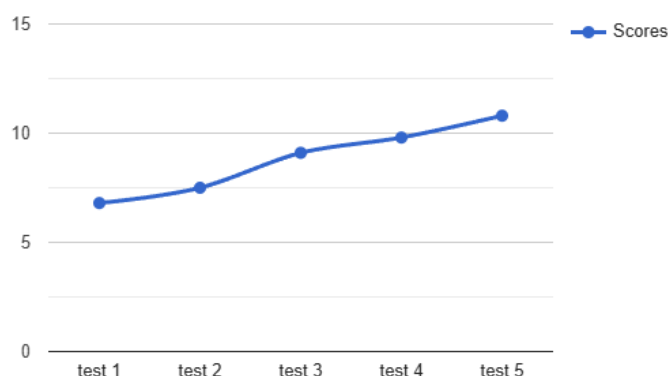
According to the results of variance analysis, a statistically significant difference was observed between the students' pronunciation skills total scores according to the time factor [$F(4-24) = 46.93$, $p < 0.01$]. According to the calculated effect size (partial $\eta^2 = 0.72$), 72% of the difference can be explained. The differences between the pre-test and post-tests were analyzed with multiple comparisons (Bonferroni corrected) and are presented in Table 3 with the relevant descriptive statistics.

Table 3. Multiple Comparisons Results of the First Research Question

Measurement	Average	SS	Significant differences ($p < 0.05$)
Pre-Test	6.86	1.95	-
Post-Test 1	7.57	0.98	-
Post-Test 2	9.14	2.27	There is a significant difference
Post-Test 3	9.86	2.48	There is a significant difference
Post-Test 4	10.86	3.38	There is a significant difference

When Table 3 is examined, the differences between the pre-test and post-tests were analyzed using Bonferroni-corrected multiple comparisons, and significant differences were identified. The difference between the pre-test and Post-Test 2, Post-Test 3 and Post-Test 4 was also found to be significant. These findings show that there was a significant improvement in pronunciation skills starting from the second post-test. In addition, when the mean scores and standard deviations obtained in five measurements were taken into account, a regular increase in pronunciation skills was observed. When the standard deviations were examined, it was determined that although there were some differences between the measurements, the increase was consistent and significant. Average scores of students for all tests is presented in Table 4 as a line graph.

Table 4. Average Scores of Students for Pre-test and Post-tests



The findings indicate that pronunciation skill scores measured over time increased significantly, following a linear trend. Moreover, the effect size was found to be substantial, highlighting that songs are an effective tool for enhancing students' pronunciation skills. These results align closely with findings reported in the existing literature.

The findings of the study indicate a significant improvement in pronunciation skills, with statistical significance observed particularly from the second post-test onward. This result is consistent with the studies conducted by Baills et al. (2021) and Zhang et al. (2023), both of which reported that singing enhances various aspects of pronunciation, including accent, intelligibility, and fluency. While Zhang et al. (2023) highlighted that singing offers notable advantages in both pronunciation and vocabulary development, the present study similarly identified that songs facilitate a generally linear improvement in students' pronunciation skills.

Teacher observations revealed that songs had a positive impact on students' pronunciation fluency and sound accuracy but contributed only limited improvement in the areas of intonation and stress. This finding aligns with the results reported in studies by Sağlam (2010) and McCormack et al. (2021), which also identified limited progress in suprasegmental features. On the other hand, studies such as those by Kahraman (2019) and Robinson (2024) emphasized that songs enhance motivation and thereby support learning, a phenomenon indirectly observed in the findings of this study as well. Furthermore, the study by Saldıraner and Cinkara (2021) highlighted that music and song-based language instruction improve students' language awareness and fluency by increasing motivation. This finding corresponds with the observations in this study, which suggest that songs enhance students' engagement in the learning process while fostering motivation.

One of the differences between the findings of this study and the literature is that no difference in pronunciation skills was identified between the singing and song-listening groups in the second experiment conducted by Baills et al. (2021). In their study, the impact of phonological imitation abilities on early-stage development in pronunciation skills was emphasized. In contrast, this study revealed a clear and linear improvement in pronunciation skills attributed to the use of songs. This discrepancy may be explained by differences in the methods employed and the participant groups involved.

In conclusion, English lessons supported by songs were found to significantly and linearly enhance students' pronunciation skills. Notably, this improvement became statistically significant starting from the second post-test. Over time, the differences between measurements continued to increase, resulting in substantial improvement. Compared to the literature, the findings largely align; however, certain discrepancies may be attributed to variations in research designs.

First Sub-Research Question

The first sub-research question of the study is “Do English lessons with songs have a significant effect on the intelligibility of students' pronunciation?”. The impact of English lessons supported by songs on the intelligibility of students' pronunciation was examined. Prior to the data analysis, normality assumption tests were conducted and the results are presented in Table 5.

Table 5. Normality Test Results of the First Subquestion

Measurement	Kolmogorov-Smirnov (p)	Shapiro-Wilk (p)
Pre-Test	0.200	0.609
Post-Test 1	0.063	0.099
Post-Test 2	0.012	0.008
Post-Test 3	0.012	0.008
Post-Test 4	0.133	0.016

When Table 5 was examined, the normality of the data for each measurement was evaluated using statistical tests. The results indicated that the data did not follow a normal distribution across all measurements ($p < 0.05$). Since the assumption of normality was not provided, the Friedman Test was applied to evaluate whether there were significant differences in the effects of English lessons supported by songs on the intelligibility of students' pronunciation. The findings regarding the test results are presented in Table 6 below.

Table 6. Friedman Test Results of the First Subquestion

N	Chi -Square (χ^2)	df	p
7	23,505	4	0.000

When Table 6 is examined, the Chi-Square value ($\chi^2 = 23.505$) and the significance value ($p < 0.001$) show that there is a statistically significant difference in the score distributions between different measurements. The differences between the pre-

test and post-tests were analyzed by multiple comparisons (Wilcoxon Signed-Rank) and presented in Table 7.

Table 7. Multiple Comparison Results of the First Subquestion

Comparison	Z Value	p-Value (Asymp. Sig.)	Significant Difference
Post-test1 – Pre-test	-1.732	0.083	No significant difference
Post-test2 – Pre-test	-2.460	0.014	Significant difference
Post-test3 – Pre-test	-2.460	0.014	Significant difference
Post-test4 – Pre-test	-2.428	0.015	Significant difference
Post-test2 – Post-test1	-2.121	0.034	Significant difference
Post-test3 – Post-test1	-2.121	0.034	Significant difference
Post-test4 – Post-test1	-2.271	0.023	Significant difference
Post-test3 – Post-test2	-1.414	0.157	No significant difference
Post-test4 – Post-test2	-1.414	0.157	No significant difference
Post-test4 – Post-test3	0.000	1.000	No significant difference

Upon examination of Table 7, the differences between the pre-test and post-tests were analyzed using multiple comparisons, and significant differences were identified. The differences between the pre-test and Post-Test 2, Post-Test 3, and Post-Test 4 were found to be significant ($p < 0.05$), indicating a significant increase in intelligibility scores over time. Additionally, significant differences were observed between Post-Test 1 and Post-Test 2, as well as between Post-Test 3 and Post-Test 4 ($p < 0.05$). These findings suggest that students' performance improved in the later stages of the intervention. However, no significant difference was found between Post-Test 3 and Post-Test 4, suggesting that performance reached a plateau and stabilized in the later phases of the intervention.

The teacher's observations are consistent with these findings. Although individual progress differences were observed among students, it was noted that all students developed more intelligible pronunciation compared to their initial levels. This suggests that the intervention process applied in the study had an overall positive effect, though progress occurred at varying rates depending on the individual needs of the students.

The findings indicate that the song-based teaching method is effective in improving pronunciation intelligibility. A significant increase in pronunciation intelligibility scores was observed over time, with this increase being particularly striking between the pre-test and Post-Test 2, Post-Test 3, and Post-Test 4. This suggests that lessons supported by songs contribute to the development of students' pronunciation skills. The lack of a significant difference between Post-Test 3 and Post-Test 4 indicates

that pronunciation intelligibility reached a certain level and stabilized. This finding may suggest that the marginal benefit of song-based learning in pronunciation development diminishes after a certain period. However, it was also supported by the teacher's observations that there was a noticeable improvement in students' pronunciation beyond suprasegmental features.

When compared to the literature, the findings of this study align with those of Rengifo (2009). He found that karaoke was effective in improving students' pronunciation skills, particularly in rhythm and vowel sounds, showing remarkable improvement. Additionally, the finding that karaoke increased students' motivation and reduced speaking anxiety aligns with the positive effects of the song-based teaching method in this study. Both studies emphasize that songs and music-based activities are effective pedagogical tools that support the learning process.

Second Sub-Research Question

The second sub-research question of the study is: “Do English lessons with songs have a significant effect on students' intonation?”. The effects of song-supported English lessons on students' intonation were examined. Prior to the data analysis, normality assumption tests were conducted and assessed in Table 8.

Table 8. Normality Test Results of the Second Subquestion

Measurement	Kolmogorov-Smirnov (p)	Shapiro-Wilk (p)
Pre-Test	Stable	Stable
Post-Test 1	Stable	Stable
Post-Test 2	Stable	Stable
Post-Test 3	Stable	Stable
Post-Test 4	0.133	0.016

When Table 8 was examined, the normality assumption for the Pre-Test, Post-Test 1, Post-Test 2, and Post-Test 3 variables was evaluated through statistical tests. However, it was found that all of these variables had stable values. Since stable variables do not show any variation, normality tests and statistical analyses could not be applied to these variables. Stable data are not suitable for rank-based or distribution-based analyses, and therefore, these variables were excluded from the statistical evaluation of the study. In the normality tests for the Post-Test 4 variable, the Kolmogorov-Smirnov ($p = 0.007$) and Shapiro-Wilk ($p = 0.001$) results indicate a violation of the normality assumption (p

< 0.05). As a result, due to the presence of stable variables and the failure to meet the normality assumption for the other variables, it was not possible to apply statistical analyses across all measurements. Therefore, the effects of song-supported English lessons on students' intonation were analyzed using the Wilcoxon Signed-Rank Test for the Pre-Test and Post-Test 4 data groups, and the results are presented in Table 9.

Table 9. Wilcoxon Signed-Rank Test Results of the Second Subquestion

	Z	Asymp. Sig. (2-tailed)
Pretest-Posttest4	-1.732	0.083

When Table 9 is examined, it can be observed that there is no statistically significant difference between Post-Test 4 and Pre-Test. Consequently, no significant difference was found in the effects of song-supported English lessons on students' intonation.

According to the teacher's observations and notes, students did not make significant progress in the area of intonation. It was observed that the students read the text in a monotonous manner, without regarding correct intonation. This finding may be related to the fact that Turkish has a flat and fixed intonation system. While the tone of sentences in Turkish is typically consistent, in English, intonation varies significantly based on sentence type, emotional context, and the information being emphasized. This structural difference may have made it more challenging for students to develop natural intonation in English.

Furthermore, it is believed that the contribution of the songs used in this study to the development of intonation was limited. In songs, intonation is shaped by musical elements, which can differ significantly from natural speech intonation. Therefore, the songs may not have had the expected effect on enhancing students' awareness of intonation.

This study examined the effects of song-supported English lessons on students' intonation skills, and the obtained findings were evaluated within the context of the relevant literature. These findings contradict some studies in the literature and show differences in certain aspects. For example, a study by Džanić and Pejić (2016) found that songs improved pronunciation features such as rhythm and intonation. Similarly, Bjorklund (2002) demonstrated that songs contributed positively to the development of stress and intonation. Studies by Wodecki (2014) and Vukićević and Ćirković-

Miladinović (2023) also showed that song-based tasks led to improvements in pronunciation features like rhythm and stress.

The reason for the discrepancy between the findings and the literature may be the individual differences and the effectiveness of learning processes in the development of intonation skills. As Wodecki (2014) highlighted, the development of intonation skills requires the systematic and conscious focus on certain pronunciation elements. Also, relevant studies may involve varying learner characteristics, including proficiency and interest.

Third Sub-Research Question

The third sub-research question of the study is: “Do English lessons with songs have a significant effect on students' stress patterns?”. The effects of song-supported English lessons on students' stress skills were examined. Prior to data analysis, normality assumption tests were conducted and assessed in Table 10.

Table 10. Normality Test Results of the Third Subquestion

Measurement	Kolmogorov-Smirnov (p)	Shapiro-Wilk (p)
Pre-Test	Stable	Stable
Post-Test 1	Stable	Stable
Post-Test 2	0.000	0.000
Post-Test 3	0.007	0.001
Post-Test 4	0.182	0.086

Upon examining Table 10, it is noted that normality tests could not be applied to the Pre-Test and Post-Test 1 measurements due to the presence of constant variables. Although the Post-Test 4 variable met the normality assumption, normality assumptions were not satisfied for the Post-Test 2 and Post-Test 3 variables. Therefore, the Friedman Test was applied to assess whether there were significant differences in the effects of song-supported English lessons on students' stress skills. The findings of the test results are presented in the following Table 11.

Table 11. Friedman Test Results of the Third Subquestion

N	Chi-Square (χ^2)	Df	p
7	6.500	2	0.039

Upon examining Table 11, the differences between the groups were found to be statistically significant ($\chi^2 = 6.500$, $p = 0.039$). To investigate which groups showed this

significant difference, multiple comparisons (Wilcoxon Signed-Rank) were performed, and the results are presented in Table 12.

Table 12. Multiple Comparison Results of the Third Subquestion

Comparison	Z Value	p-Value (Asymp. Sig.)	Significant Difference
Posttest3 - Posttest2	-1.732	0.083	No significant difference
Posttest4 - Posttest2	-2.000	0.046	Significant difference
Posttest4 - Posttest3	-1.000	0.317	No significant difference

Examining Table 12, a significant difference was found between Post-Test 4 and Post-Test 2. No significant difference was observed between the other pairs (Post-Test 4 - Post-Test 3 and Post-Test 3 - Post-Test 2).

According to the teacher's notes, stress was one of the skills with the least progress. Although some students showed slight improvement in later measurements, no significant difference was observed overall. It was observed that students prioritized accurate word articulation and reading speed to such an extent that they were unable to manage proper word stress. When students apply correct stress, it is usually limited to the words or phrases they have repeatedly heard and practiced with the teacher during instruction. The researcher interprets this finding as a result of the difference between Turkish, a syllable-timed language, and English, a stress-timed language, which may have made it difficult for students to learn the stress patterns in English. While syllables are stressed equally in Turkish, in English, certain words or syllables need to be prominently emphasized. This structural difference may have hindered students from achieving a natural flow in the use of stress in English.

The findings of the study revealed that the differences between the groups were statistically significant (Friedman Test, $\chi^2 = 6.500$, $p = 0.039$), but the development of the stress skill did not follow a consistent trajectory. The significant difference between Post-Test 4 and Post-Test 2 indicates that the song-supported lessons contributed to the development of the stress skill. However, the lack of significant differences between Post-Test 4 and Post-Test 3, as well as between Post-Test 3 and Post-Test 2, suggests that this effect was not consistent. The qualitative findings based on the teacher's observations also highlighted the issue of stress, yet they indicated that a significant portion of the students did not show meaningful progress.

When comparing the findings with the literature, certain similarities and differences are evident. Harold Mozell's (2002) thesis examined the impact of American English songs on features such as stress and rhythm, revealing that while songs enhanced suprasegmental skills, these gains were not maintained in the long term. This aligns with the findings of the present study, particularly the significant difference between Post-Test 4 and Post-Test 2. However, the absence of significant differences between Post-Test 3 and the other tests emphasizes that the development in stress patterns was not consistent, suggesting that the effects may have been limited.

The study by Jackson (2019) highlighted the positive effects of karaoke on features such as stress, intonation, and blending, with a particular focus on the development of phonological awareness. These findings differ from the present research, where song-supported teaching showed limited effects on stress skills. In conclusion, this study has shown that while song-supported English lessons may provide some contribution to students' stress skills, the effect is not consistent.

Fourth Sub-Research Question

The fourth sub-research question of the study is, "Do English lessons with songs have a significant effect on students' accuracy in individual sounds?" The effects of song-supported English lessons on students' pronunciation accuracy were examined. Prior to the analysis of the data, normality assumption tests were conducted and assessed in Table 13.

Table 13. Normality Test Results of the Fourth Subquestion

Measurement	Kolmogorov-Smirnov (p)	Shapiro-Wilk (p)
Pre-Test	0.200	0.609
Post-Test 1	0.000	0.000
Post-Test 2	0.200	0.482
Post-Test 3	0.149	0.262
Post-Test 4	0.084	0.048

When Table 13 is examined, it is observed that the Pre-Test, Post-Test 2, and Post-Test 3 variables meet the normality assumption. However, Post-Test 1 does not follow a normal distribution. Post-Test 4 shows borderline behavior and cannot be fully considered to meet the normality assumption. Since the normality assumption was not satisfied for all variables, the Friedman Test was applied to assess whether there are significant

differences in the effects of song-supported English lessons on students' accuracy of individual sounds. The results of the test are presented in Table 14 below.

Table 14. Friedman Test Results of the Fourth Subquestion

N	Chi-Square (χ^2)	df	p
7	18.750	4	0.001

When Table 14 is examined, it is found that the differences between the groups are statistically significant ($\chi^2 = 18.750$, $p = 0.001$). To investigate which groups show this significant difference, multiple comparisons (Wilcoxon Signed-Rank) were conducted, and the results are presented in Table 15.

Table 15. Multiple Comparison Results of the Fourth Subquestion

Comparison	Z Value	p-Value (Asymp. Sig.)	Significant Difference
Posttest1 – Pretest	-1.000	0.317	No significant difference
Posttest2 – Pretest	-2.121	0.034	Significant difference
Posttest3 – Pretest	-2.530	0.011	Significant difference
Posttest4 – Pretest	-2.460	0.014	Significant difference
Posttest2 - Posttest1	-1.633	0.102	No significant difference
Posttest3 - Posttest1	-1.857	0.063	No significant difference
Posttest4 - Posttest1	-1.890	0.059	No significant difference
Posttest3 - Posttest2	-1.414	0.157	No significant difference
Posttest4 - Posttest2	-1.732	0.083	No significant difference
Posttest4 - Posttest3	-1.000	0.317	No significant difference

When Table 15 is examined, the differences between the pre-test and post-tests were analyzed through multiple comparisons, revealing significant differences ($p < 0.05$). Specifically, the differences between the pre-test and Post-Test 2, Post-Test 3, and Post-Test 4 were found to be statistically significant. This indicates that the intelligibility scores measured increased significantly over time.

Based on the teacher's observations and notes, it was noted that students, in the first test, were unable to correctly pronounce words they had not previously encountered.

However, in subsequent measurements, some students were able to apply the sounds practiced with songs to unfamiliar words. Particularly, many students who initially struggled with the pronunciation of sounds that do not exist in Turkish, such as [θ], [ð], and [æ], were observed to correct their mispronunciations over time. The researcher concluded that the most difficult pronunciation errors to correct were due to orthographic interference or phonemic misgeneralization.

In this study, the impact of song-supported English lessons on students' accuracy of individual sounds was examined, and the findings were assessed by comparing them with academic literature. The results of the study revealed that song-supported teaching significantly improved the accuracy of individual sounds, with noticeable development observed from the early stages of the intervention. The significant differences found between the pre-test and post-tests indicate that song-supported lessons are an effective method. However, it was observed that the rate of improvement decreased or plateaued in the later tests. This suggests that students' progress may be limited once a certain level of proficiency is reached.

The researcher's observations during the implementation revealed that, after working with songs, students mostly pronounced the targeted phonemes correctly in the follow-up activities. The presence of students who applied the rules they had learned to correctly pronounce unfamiliar words suggests that song-supported lessons contribute to long-term learning. Furthermore, it was noted that students more frequently pronounced vowel sounds correctly compared to consonants.

When compared to the literature, the findings show several similarities and differences. Good et al. (2015) found that students who sang improved their pronunciation of vowel sounds, but there was no significant difference for consonants, which aligns with the observation notes in the present study. Harold Mozell's (2002) research also indicated general improvement in both vowel and consonant pronunciation, but noted that students could revert to previous patterns over time. This suggests the need for different strategies to ensure the continuity of improvement.

The study by Izzah and Sukrisno (2017) demonstrated significant improvements in students' pronunciation and participation in song-based groups, which aligns with the findings of the present study. Similarly, the research by Rais et al. (2019) emphasized that

repeated practice with songs enhances students' pronunciation accuracy and self-confidence, which is consistent with the qualitative observations made in this research.

On the other hand, the study by Habboushi (1998) found that traditional methods were more effective than songs, presenting a contrast to the findings of this research. Likewise, Jackson's (2019) research highlighted that gains in the pronunciation of difficult phonemes were limited, indicating that improvements may vary depending on specific segmental features.

In conclusion, song-supported English lessons have been shown to have a positive impact on the accuracy of individual sounds, with students being more successful in pronouncing vowel sounds.



CONCLUSION AND RECOMMENDATION

Conclusion

The findings of the study demonstrated that instruction incorporating songs as a core teaching tool has a significant and measurable impact on enhancing students' English pronunciation skills. Students exhibited remarkable progress in key pronunciation aspects, including accentedness, intelligibility, and fluency, with this advancement following a consistent and linear trajectory over the course of the intervention. However, despite the notable gains in these areas, the study revealed that there was relatively limited improvement in suprasegmental features, such as intonation and stress, which play a critical role in achieving natural and native-like speech patterns.

The data further underscore the role of song-based instruction in promoting pronunciation intelligibility. The steady increase in students' pronunciation scores across the testing phases highlights the efficacy of utilizing songs as a pedagogical resource in the language learning process. Nonetheless, it is important to note that the absence of a statistically significant difference between the results of post-test 3 and post-test 4 suggests a plateau in students' progress. This stabilization in scores implies that pronunciation improvements may eventually reach a threshold, beyond which further advancements require additional or alternative instructional strategies.

In relation to suprasegmental features, the study revealed that the impact of song-based instruction on intonation development was relatively minimal. Although descriptive statistics pointed to some degree of improvement in intonation scores, this progress did not reach the level of statistical significance. This highlights the need for more specialized and focused teaching methods aimed at fostering the development of suprasegmental aspects, such as intonation and stress, which are essential for achieving greater fluency and communicative competence.

Additionally, the research explored the effect of song-based lessons on students' stress-placement skills. While the findings suggested that these lessons may have a certain positive influence on the accurate placement of stress, this effect appeared to be inconsistent and did not result in sustained progress over time. Despite the presence of significant differences between some test results, the overall findings point to challenges in maintaining the continuity and long-term effectiveness of this instructional approach for developing stress-placement skills. A comparison with similar studies in the existing

literature further supports the conclusion that while song-based instruction can yield short-term benefits for suprasegmental features, it does not consistently lead to generalized or long-term improvements in this area.

Finally, the study confirmed the positive influence of song-supported lessons on the accurate articulation of individual sounds. The results revealed particularly substantial gains in the pronunciation of vowel sounds, suggesting that students were more successful in mastering vowels compared to consonants. While progress in consonant sounds was observed, it was relatively less pronounced. These improvements, which were evident even from the early stages of the intervention, underscore the value of songs as an effective tool to enhance students' pronunciation accuracy and overall language learning experience.

Recommendation

Several recommendations have been proposed for educators and academic studies. Firstly, although English lessons supported by songs have been effective, the limited development of suprasegmental skills (intonation and stress) has been observed. In this context, it would be beneficial for teachers to complement song-based teaching with additional strategies that focus on suprasegmental skills. By incorporating more systematic practices, teachers can help students achieve more sustainable improvements in these areas. Furthermore, while song-based instruction has proven effective for segmental skills like sound accuracy and intelligibility, it is recommended to provide additional practice on challenging phonemes and sounds. Teachers might consider designing activities that reinforce pronunciation and enhance student success.

Researchers observing the parallel between students' pronunciation improvement and indirect effects, such as increased motivation and interest, suggest that teachers should consider these aspects when shaping their lessons. Since increased motivation and interest play critical roles in language learning, teachers are encouraged to continue using songs that foster engagement and enjoyment in the classroom. Additionally, to sustain the initial progress observed in song-based lessons, it is crucial for teachers to monitor students' progress more systematically and consistently over time. Regular assessment and evaluation of developing skills will enable teachers to identify students' areas of weakness and provide personalized feedback to address them.

Additionally, comparing song-based instruction with other teaching methods could provide a broader perspective on its effectiveness and offer new insights into integrating various language teaching approaches.



REFERENCES

- Alisaari, J., and Heikkola, L. M. (2017). Songs and poems in the language classroom: Teachers' beliefs and practices. *Teaching and Teacher Education*, 63, 231-242.
- Atilir, I. and Su-Bergil, A. (2020). Reflections of English Language Teachers about the Effect of Using Songs on Pronunciation. *FIRE: Futuristic Implementations of Research in Education*, 1(2), 64-77.
- Baills, F., Zhang, Y., Cheng, Y., Bu, Y. and Prieto, P. (2021). Listening to songs and singing benefitted initial stages of second language pronunciation but not recall of word meaning. *Language Learning*, 71(2), 369-413.
- Başaran, S. (2020). *Study on the relationship between musical aptitude levels and pronunciation skills of EFL learners*. Master's thesis. Gaziantep University.
- Bjorklund, K. S. (2002). *Music application in the ESL classroom*. Master's thesis. University of Wyoming.
- Borer, B. (2018). Teaching and learning pragmatics and speech acts: An instructional pragmatics curriculum development project for EFL learners. *School of Education and Leadership Student Capstone Projects*. 176.
- Brown, H. D. (2014). *Principles of language learning and teaching: A course in second language acquisition*. Pearson.
- Cambridge English. (2019). *Assessing speaking performance – Level A2*. Cambridge Assessment English. Retrieved from <https://static.cambridge.org/content/id/urn:cambridge.org:id:article:S1366728920000747/resource/name/S1366728920000747sup001.pdf>
- Campbell, D. T., and Riecken, H. W. (1968). Quasi-experimental design. *International encyclopedia of the social sciences*, 5(3), 259-263.
- Carson, J. G. and Longhini, A. (2002). Focusing on learning styles and strategies: A diary study in an immersion setting. *Language learning*, 52(2), 401-438.
- Castelo, A. (2018). Songs for pronunciation teaching: A guiding model. *Journal of Innovation in Psychology, Education and Didactics*, 1(22), 7-22.

- Celce-Murcia, M., Brinton, D. M. and Goodwin, J. M. (2010). *Teaching pronunciation hardback with audio CDs (2): A course book and reference guide*. Cambridge University Press.
- Chromčáková, R. (2022). *Improving young learners' English pronunciation in primary education*. Master's thesis. Masaryk University Faculty of Education. Brno.
- Clark, H. H., 1992. *Arenas of Language Use*. Chicago, IL: University of Chicago Press.
- Cohen, A. D. (2008). Speaking strategies for independent learning: A focus on pragmatic performance. *Language learning strategies in independent settings*, 33, 119.
- Cohen, L., Manion, L. and Morrison, K. (2007). *Research Methods in Education (6th ed.)*. Routledge. DOI: 10.4324/9780203029053.
- Cohen, L., Manion, L. and Morrison, K. (2018). *Research methods in education (8th ed.)*. Routledge. DOI: 10.4324/9781315456539
- Corder, S. P. (1967). The significance of learners' errors. *International Review of Applied Linguistics in Language Teaching*, 5(4), 161-170.
- Cresswell, J. W. (2009). *Research design: Qualitative, quantitative and mixed methods approaches (3rd ed.)*. Sage Publications.
- Creswell, J. W. and Guetterman, T. C. (2019). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research (6th ed.)*. Pearson.
- Darcy, I. (2018). Powerful and effective pronunciation instruction: How can we achieve it?. *The CATESOL Journal*, 30(1), 13–45.
- Dörnyei, Z. (2007). *Research methods in applied linguistics: Quantitative, qualitative, and mixed methodologies*. Oxford University Press.
- Dreyer, C., Wissing, D. and Wissing, M. (1996). The relationship between cognitive styles and pronunciation accuracy in English as a second language. *South African Journal of Linguistics*, 14(34), 37–62. DOI: 10.1080/10118063.1996.9724093
- Durand, S. (2019). *Songs in adult ESL classrooms: Examining materials, practices, and teachers' pedagogical decision-making*. Doctoral dissertation. University of Illinois at Chicago.

- Džanić, N. D., and Pejić, A. (2016). The effect of using songs on young learners and their motivation for learning English. *NETSOL: New Trends in Social and Liberal Sciences*, 1(2), 40-54.
- Eckman, F. and Iverson, G.K. (2013). The role of native language phonology in the production of L2 contrasts. *Studies in Second Language Acquisition*, 35(1), pp. 67–92. DOI: 10.1017/S027226311200068X
- Elliott, A. R. (1995). Field independence/dependence, hemispheric specialization, and attitude in relation to pronunciation accuracy in Spanish as a foreign language. *The Modern Language Journal*, 79, 356-371. DOI: 10.1111/J.1540-4781.1995.TB01112.X
- Etikan, I., Musa, S. A. and Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1–4. DOI: 10.11648/j.ajtas.20160501.11
- Evers, K. and Chen, S. (2021). Effects of automatic speech recognition software on pronunciation for adults with different learning styles. *Journal of Educational Computing Research*, 59(4), 669-685.
- Foote, J. A., Holtby, A. K. and Derwing, T. M. (2011). Survey of the teaching of pronunciation in adult ESL programs in Canada, 2010. *TESL Canada journal*, 1-22.
- Gilbert, J. B. (2016, March 19). *Teaching pronunciation: Simplicity is the key*. Presented in IATEFL Pronunciation Special Interest Group. Retrieved from <https://pronsig.iatefl.org/simplicity-is-the-key/>
- Good, A. J., Russo, F. A., and Sullivan, J. (2015). The efficacy of singing in foreign-language learning. *Psychology of Music*, 43(5), 627-640.
- Habboushi, M. (1998). *The use of rap songs to aid the teaching of pronunciation to Arab students at the University of Balamand in Lebanon*. Master's thesis. Bilkent University.
- Israel, H. (2013). Language learning enhanced by music and song. *Literacy Information and Computer Education Journal*, 1360-1366. DOI: 10.20533/LICEJ.2040.2589.2013.0180

- Izzah, U., and Sukrisno, A. (2017). The effectiveness of using songs and dialogues to teach students pronunciation. *English Education Journal*, 7(2), 185-201.
- Jackson, M. D. (2019). *Pitch perfect pronunciation: Using classroom karaoke as an EFL teaching tool*. Doctoral dissertation. Alliant International University.
- Jarosz, A. (2019). The place of pronunciation instruction in the teaching of English. *English Pronunciation in L2 Instruction: The Case of Secondary School Learners*, 1-24.
- Kahraman, H. (2019). *Şarkı ve müziğin yabancı dil öğretiminde yeri ve önemi*. Master's thesis. Marmara University.
- Kelly, G. (2000). *How to teach pronunciation*. Pearson Education Limited.
- Kkese, E. and Karpava, S. (2022). Effect of task, word length and frequency on speech perception in L2 English: Implications for L2 pronunciation teaching and training. *Second Language Pronunciation: Different Approaches to Teaching and Training*, 64, 41.
- Krashen, S. D. (1982, January 1). *Principles and Practice in Second Language Acquisition*. Pergamon.
- Lin, X. (2024). Learning styles and second language acquisition: A review of influences, factors, and educational implication. *Journal of Education, Humanities and Social Sciences*, 26, 891-896.
- Loeb, S., Dynarski, S., McFarland, D., Morris, P., Reardon, S., and Reber, S. (2017). Descriptive analysis in education: A guide for researchers. NCEE 2017-4023. *National Center for Education Evaluation and Regional Assistance*.
- Lubna, K. S. Q. A. and Toyyibah, T. (2024). Factors affecting the success of learning English with limited exposure: Reflections from non-English department students. *Journal of Language Intelligence and Culture*, 6(2). DOI: 10.35719/jlic.v6i2.126
- Luoma, S. (2010). *Assessing speaking*. Cambridge University Press. DOI: 10.1017/CBO9780511733017.009
- McCormack, B. A., Klopper, C., Kitson, L., and Westerveld, M. (2018). The potential for music to develop pronunciation in students with English as an Additional

- Language or Dialect (EAL/D). *Australian journal of music education*, 52(1), 43-50.
- Miles, M. B., and Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook (2nd ed.)*. Sage Publications, Inc.
- Millington, N. T. (2011). Using songs effectively to teach English to young learners. *Language Education in Asia*, 2(1), 134-141.
- MoNE (Ministry of National Education). (2018). *İngilizce dersi öğretim programı*. Retrieved from <https://mufredat.meb.gov.tr/>
- Morley, J. (1991). The pronunciation component in teaching English to speakers of other languages. *TESOL Quarterly*, 25(3), 481-520.
- Mozell, H. (2006). *The effect of American English songs on the pronunciation of second language learners of English*. Master's thesis. California State University, Dominguez Hills.
- Nagle, C. (2018). Motivation, comprehensibility, and accentedness in L2 spanish: Investigating motivation as a time-varying predictor of pronunciation development. *The Modern Language Journal*, 102, 199-217. DOI: 10.1111/modl.12461
- Nagle, C. L. and Huensch, A. (2020). Expanding the scope of L2 intelligibility research: Intelligibility, comprehensibility, and accentedness in L2 Spanish. *Journal of Second Language Pronunciation*, 6(3), 329-351.
- Ni, H. (2012). The effects of affective factors in SLA and pedagogical implications. *Theory & Practice in Language Studies*, 2(7).
- Odisho, E. (2007). A multisensory, multicognitive approach to teaching pronunciation. *Linguística: Revista de Estudos Linguísticos da Universidade do Porto*, 2, 3-28.
- Parker, M. (2000, January). Pronunciation and grammar: Using video and audio activities. *In English Teaching Forum*, 38(1), 24-31.
- Rais, B., Pranowo, D. D., and Sari, R. P. I. P. (2020, August). The Use of Song in Teaching English Pronunciation. In *1st International Conference on Language, Literature, and Arts Education (ICLLAE 2019)* (pp. 133-137). Atlantis Press.

- Reed, M. and Levis, J. M. (Editors). (2015). *The Handbook of English Pronunciation*. West Sussex: John Wiley & Sons, Inc.
- Rengifo, A. R. (2009). Improving pronunciation through the use of karaoke in an adult English class. *Profile Issues in Teachers Professional Development*, (11), 91-106.
- Robinson, I. M. (2024). Harmonious learning: songs in English for ESP. *Language Learning in Higher Education*, 14(1), 183-195.
- Sağlam, E. B. (2010). *The effects of music on English language learners' speaking fluency and on their motivation*. Master's thesis. Bilkent University.
- Saito, K., Suzuki, S., Oyama, T. and Akiyama, Y. (2021). How does longitudinal interaction promote second language speech learning? Roles of learner experience and proficiency levels. *Second Language Research*, 37(4), 547-571.
- Saldıraner, G., and Cinkara, E. (2021). Using songs in teaching pronunciation to young EFL learners. *Pasaa*, 62(1), 119-141.
- Selinker, L. (1972). Interlanguage. *International Review of Applied Linguistics in Language Teaching*, 10(3), 219-231.
- Sevik, M. (2011). Teacher views about using songs in teaching English to young learners. *Educational Research and Reviews*, 6(21), 1027.
- Shao, Y., Saito, K. and Tierney, A. (2023). How does having a good ear promote instructed second language pronunciation development? Roles of domain-general auditory processing in choral repetition training. *TESOL J*, 57, 33-63. DOI: 10.1002/tesq.3120
- Szyszkka, M. (2014). Multimedia in Learning English as a foreign language as preferred by German, Spanish, and Polish teenagers. *New Media and Perennial Problems in Foreign Language Learning and Teaching*, 3(19). DOI: 10.1007/978-3-319-07686-7_1
- Szyszkka, M. (2017). *Pronunciation learning strategies and language anxiety*. Switzerland: Springer, 10, 978-3.
- Şimşek, M. R. and DüNDAR, E. (2017). Investigating EFL coursebook research in Turkey: Trends in graduate theses of the 2001-2013 period. *Educational Sciences: Theory & Practice*, 17(3).

- Tabanlıoğlu, S. (2003). *The relationship between learning styles and language learning strategies of pre-intermediate EAP students*. Master's thesis. Middle East Technical University.
- Thomson, R. I. and Derwing, T. M. (2015). The effectiveness of L2 pronunciation instruction: A narrative review. *Applied Linguistics*, 36(3), 326–344. DOI: 10.1093/applin/amu032
- Uchihara, T., Webb, S., Saito, K. and Trofimovich, P. (2023). Frequency of exposure influences accentedness and comprehensibility in learners' pronunciation of second language words. *Language Learning*, 73(1), 84-125.
- Uzun, T. (2022). Preservice English teachers' attitudes and beliefs about learning and teaching pronunciation. *Dil Dergisi*, 173(2). 22-42
- Vukićević, N. M., and Ćirković-Miladinović, I. R. (2023). Improving English pronunciation by using instructive musical exercises: University teaching context in Serbia. *Journal of Language Teaching and Research*, 14(5), 1159-1167.
- White, C. (2008). Language learning strategies in independent language learning: An overview. *Language learning strategies in independent settings*, 3-24.
- Wodecki, R. (2015). *Using pop songs to improve pronunciation in the EFL classroom*. Doctoral dissertation, Masarykova University. Brno.
- Yağız, O., Kaya, F. and Ötügen, R. (2024). The effectiveness of L2 pronunciation instruction: A critical systematic review of the intervention studies. *The Literacy Trek*, 10(1), 21-41.
- Yu, R. J. (2023). *Exploring effective inclusive music education pedagogies for engaging students with different learning abilities: A selective and systematic literature review*. Master's thesis. University of Auckland.
- Yüksel, M. E. (2020). *Effects of song-based lessons on English learning motivation and attitudes toward the English language and foreign culture: A case of 12th grade foreign language students in Turkey*. Master's thesis. Gaziantep University.
- Zhang, Y., Baills, F., and Prieto, P. (2023). Singing songs facilitates L2 pronunciation and vocabulary learning: A study with Chinese adolescent ESL learners. *Languages*, 8(3), 219.

APPENDICES

Appendix 1. Data Collection Tool

Pronunciation	
Are the utterances mostly clear? Can the speaker be mostly understood?	
Good:	Not so good:
Does the speaker show limited control of intonation?	
Good:	Not so good:
Does the speaker show limited control of word and sentence stress?	
Good:	Not so good:
Are individual sounds mostly clear?	
Good:	Not so good:
Comments:	

Appendix 2. Texts used as Pre-test and Post-tests

Text 1

Hi Lucia

How are you? It was so nice to meet you last week in Sydney at the sales meeting. How was the rest of your trip? Did you see any kangaroos? I hope you got home to Mexico City OK.

Anyway, I have the documents about the new Berlin offices. We're going to be open in three months. I moved here from London just last week. They are very nice offices, and the location is perfect. There are lots of restaurants, cafés and banks in the area. There's also public transport; we are next to an U-Bahn (that is the name for the metro here). Maybe you can come and see them one day? I would love to show you Berlin, especially in the winter. You said you have never seen snow – you will see lots here!

Here's a photo of you and me at the restaurant in Sydney. That was a very fun night! Remember the singing Englishman? Crazy! Please send me any other photos you have of that night. Good memories.

Please give me your email address and I will send you the documents.

Bye for now

Mikel

Text 2

Many studies about language learning ask the question: What makes a good language learner? There are some things that good language learners do and some things they don't do. Here are some of the most useful suggestions from studies.

Don't be afraid of making mistakes. People often get things wrong. Good language learners notice their mistakes and learn from them.

Do group activities. People use language to communicate with other people. A good language learner always looks for opportunities to talk with other students.

Make notes during every class. Notes help you to remember new language. Look at your notes when you do your homework.

Use a dictionary. Good language learners often use dictionaries to check the meaning of words they don't know. They also make their own vocabulary lists.

Think in the language you're learning outside the classroom. When you're shopping or walking down the street, remember useful words and phrases. Sometimes, when you're at home, say new words to practise your pronunciation.

Do extra practice. Test and improve your language, reading and listening skills with self-study material. You can find a lot of this online.

Imagine yourself speaking in the language. Many good language learners can see and hear themselves speaking in the language. This helps their motivation.

Enjoy the process. Good language learners have fun with the language. Watch a TV series or film, listen to songs, play video games or read a book. It's never too late to become a good language learner.

Text 3

Maria

I am an architect with 20 years' experience of designing and developing spaces. I am a partner in the award-winning STG Architects Ltd, which is famous for its work on the Galroy Building in London. I enjoy working with people from all over the world and have international experience of working in Italy, Greece, Thailand, Australia and Brazil. I have a Master of Science from Sheffield University and a BA in Architecture from Hull University. I also speak Italian and Thai. When I am not working, I spend my time hiking, skiing and diving.

Emily

I am an experienced sales manager with 12 years' experience of developing customer service teams. I am skilled in negotiation, team motivation and building successful sales teams. After ten years of working in sales and customer service at Halo Bank, I am now the sales office manager of a team of 120 at Southern General Plastics Ltd. I have an MBA from Stanford University and a degree in Business Studies from Cornell University. I am creative and hardworking, and enjoy working with others.

Text 4

To: Grace Yang

Date: 6 September

Subject: Invitation to job interview

Dear Grace,

Thank you for your application for the position of sales manager.

We would like to invite you for an interview at 10 a.m. on Monday 21 September at our offices at The Shard, 32 London Bridge Street, London.

You will meet with our head of sales, Susan Park, and the interview will last for about 45 minutes. During this time, you will have the opportunity to find out more about the position and learn more about our company.

Please bring your CV and references to the interview. You will also need to show a form of ID at reception to receive a visitor's pass. Please ask for me as soon as you arrive.

If you have any questions or if you wish to reschedule, please call me on 555-1234 or email me by 12 September.

I look forward to meeting you.

Best regards,

Anna Green

Human Resources Assistant

Text 5

What can I take on the plane as hand luggage?

Please note that passengers can only take ONE suitcase onto the plane. It must be no bigger than 55cm x 22cm x 35cm and weigh no more than 10kg.

You can also take one small laptop bag or handbag that can fit under the seat in front of you. If you have two bags, their total weight cannot be more than 10kg. If your bag is too big or too heavy, you will not be allowed to take it onto the plane. Staff will put it in the hold for you and you will have to pay extra.

Please make sure mobile phones and other devices are fully charged so that security staff can check them.

Liquids in bottles bigger than 100ml are allowed on board if you buy them in the airport shops after you've passed security.

We hope you enjoy your flight!