



Copyright © 2026 by Cherkas Global University
All rights reserved.
Published in the USA

European Journal of Contemporary Education
E-ISSN 2305-6746
2026. 15(1): 3-12
DOI: 10.13187/ejced.2026.1.3
<https://ejce.cherkasgu.press>

IMPORTANT NOTICE! Any copying, reproduction, distribution, republication (in whole or in part), or otherwise commercial use of this work in violation of the author's rights will be prosecuted in accordance with international law. The use of hyperlinks to the work will not be considered copyright infringement.



**European Journal of
Contemporary Education**



ELECTRONIC JOURNAL

The Problems of Contemporary Education

Unlocking Language Learning: Boosting Vocabulary in Young EFL Learners by Nursery Rhymes in Turkey

Peri Aslan ^{a, *}

^aInonu University, Malatya, Turkey

Abstract

Choosing an efficient technique for teaching vocabulary in second language acquisition is one of the most important aspects of language learning, and without it, communication is impossible. This topic is the subject of extensive investigation today. This study investigates the impact of nursery rhymes on vocabulary acquisition and motivation among young Turkish EFL learners, exploring potential gender-based differences in vocabulary performance. A sample of 40 non-randomly selected learners was divided into two groups: one using a traditional teaching method and the other nursery rhymes, with each group containing male and female participants. A pre-test ensured homogeneity between groups. After twelve weeks of instruction, with five sessions per week, an independent t-test was used to assess differences in vocabulary performance between the nursery rhyme and control group. Results indicated a significant positive effect of nursery rhymes on vocabulary acquisition and motivation, although no statistically significant gender differences were observed.

Keywords: nursery rhymes, vocabulary acquisition, language learning, motivation, gender differences, young learners.

1. Introduction

Vocabulary is an elementary part of language learning and the basis on which communicative competence and understanding are built (Nation, 2018). Webb and Nation have noted that vocabulary is a basic building block in language acquisition, especially so for children learning spoken and written language (2017). In their study, Karatas et al. (2021) observed that vocabulary teaching at the initial stage of any second language supports long-term retention and helps the

* Corresponding author

E-mail addresses: peri.aslan@inonu.edu.tr (P. Aslan)

creation of more accessible communication routes. Given this, without a solid vocabulary base, language learners tend to struggle in articulating their thoughts and exchanging conversations (Folse, 2016).

Recent research on vocabulary teaching strategies has gravitated towards strategies stretching beyond memorization, with Ellis (2017) insisting that engagement and interaction are central to vocabulary learning and drawing on the notion that active, contextually-rich instruction will foster better retention and understanding of new words. In Turkey, the frequent use of direct translation in vocabulary teaching means that students report difficulties in remembering words and a lack of strategies for vocabulary acquisition (Aslan, 2024). This supports the findings of Alhazmi (2024), who speaks of the need for techniques that incorporate auditory and visual aids in order to help learners in vocabulary retention in non-native contexts.

The use of music and rhythmic groups, especially nursery rhymes and songs, is increasingly popular as an effective medium for teaching new vocabularies. The feelgood factor of music based on Lozanov's (1978) suggestopedia method, which gives backing to music in language learning to uphold a relaxed, receptive state, has been established by more recent studies that have shown that music positively inscribes the word and increases learner's memory and engagement (Pavia et al., 2019). Music activates both hemispheres, calling upon cognitive and creative powers at the service of language acquisition, especially from the young learner who responds to rhythm and delivery without self-consciousness (Pastuszek-Lipińska, 2025). Eccles et al. (2011) explains how music adds support to phonological awareness, so that the ear for the word becomes a valuable ally in vocabulary acquisition.

Songs, an integral part of early childhood experiences, expose the student to the vocabulary repeatedly in an easily memorable way, aiding retention of vocabulary (Koelsch, 2025). Advances in educational technology make many songs readily available to the teacher, resulting in more stimulating lessons. Salcedo (2010) observes that the use of music in the classroom has helpful effects on vocabulary retention and lesson enjoyment, motivating students to learn. The repetitive nature of music, coupled with its emotional and mnemonic qualities, makes vocabulary learning more fun for kids (Li, Brand, 2019).

Yet another study finds that using songs helps vocabulary teaching not only by engraving words into memory but also by promoting phonological skills like rhyme and rhythm that contribute to language learning overall (Hamilton et al., 2024). Songs played in lessons often also the element of natural repetition, can further promote committing words to long term memory. Topal (2024) further state that incorporating music and rhythm into language teaching promotes learner participation and creates a positive atmosphere in the classroom, where actual language learning can take place.

Overall, embedding music and nursery rhymes into vocabulary instruction addresses several challenges in traditional vocabulary teaching by enhancing student engagement and supporting cognitive development. This approach aligns with modern understandings of language acquisition, offering a holistic and enjoyable method for helping young EFL learners master vocabulary more effectively and with greater enthusiasm.

The Previous Research

In applied linguistics and language education, teaching vocabulary remains a crucial part of second language learning.

Since vocabulary is a constitutive element of fluency, or the proficiency of using a language, it is possible and important that young learners receive good vocabulary training. Many probable ways have been put forward to teach vocabulary, but we might mention the shift towards appealing tactics aimed at the emotional and/or cognitive needs of young learners.

Using nursery rhymes and music as teaching aids for language acquisition is a noteworthy strategy. For young EFL learners, research has repeatedly demonstrated that music improves memory retention and enriches the learning process (Fitria, 2023). According to Thornbury (2002), audiovisual tools provide a multimodal learning environment and greatly enhance comprehension and recall of new language. Nursery rhymes are a great way to help children learn new words because of their captivating tunes and rhythmic rhythms. Most of the researchers highlighted nursery rhymes' potential as useful tools in language teaching by pointing out that they can improve kids' word recognition abilities. More recent evidence also confirms that rhythm and melody help children detect word boundaries and enhance phonemic awareness from an early age (University of Cambridge, 2023).

Chomsky's (1982) theory that music engages both sides of the brain and cultivates a more balanced learning experience is consolidation for the music-language connection. This reinforces Krashen's (1985) emotional filter and intelligible input theories. Learners acquire new vocabulary through familiar language contexts that allow them to understand newer words. According to his emotional filter theory, learners are likely to engage more with the language when they are excited and self-confident, lowering acquisition barriers. Thus, it is proposed that adding nursery rhymes to the curriculum will enhance vocabulary acquisition by making the language more engaging and accessible. More recent classroom-based studies have shown that songs and TPR activities increase vocabulary retention and decrease anxiety among young EFL learners (Magnussen, Sukying 2021).

A conceptual framework for understanding how music and pictures might work together towards language acquisition, is found in Paivio's dual coding method (2007). According to this approach, students learn with verbal and non-verbal means. By using nursery rhymes wherein the lyrics are coupled with pictures to engage both strategies, learners will better be able to take words "down the ears' well", boosting their memory to learn and remember. By creating more channels to retrieve knowledge, this dual coding method enhances learning. Recent studies demonstrate that dual coding advection achieves greater academic success and long-term vocabulary retention (Mir et al., 2023; Miller, 2024).

The benefits of songs and rhymes in vocabulary teaching have been the focus of several studies. According to Chen et al (2024), music used in language lessons allows students to improve their speaking, auditory, reading and writing skills. Likewise, recent new studies have shown that music activities in the classroom encouraged students to be more fluent and confident as they acquired vocabulary. From these results one can conclude that music and nursery rhymes help foster a lively and fruitful atmosphere for language learning. They confirmed the general efficacy of song-based interventions for vocabulary acquisition in young second/foreign language learners (Acar, Çetin, 2025).

Bolduc and Lefebvre (2012) explore how using music raises the willingness of young learners to learn. When children hear enjoyable and personal things like nursery rhymes, they want to get more involved and the joy they feel creates a higher chance of learning. These studies link nicely with Krashen's Affective Filter Hypothesis. Also, a study from Oman found that nursery rhymes improve comprehension and remembering abilities of kindergarten pupils (Rajan, Saadat, 2025).

Research by Zainol Abidini et al. (2008) further supports the importance of employing nursery rhymes for vocabulary development by showing that songs and music are more effective than conventional vocabulary teaching techniques. Acar & Çetin (2025) likewise found that music and rhythmic activities facilitate language acquisition, especially for teaching pronunciation.

As studies by Winter (2010) and Salcedo (2010) have shown, music can construct links for words, allowing users to learn the language through practice and repetition. To improvise language chunks adding in a rhyme or rhythm will entice rehearsal and memory improvement, Ludke et al. (2013) counter and state that music involvement strengthens the transferring of what has been learned to long-term memory. This is justified by the idea of melodic learning in which says rhythm and rhyme aids the memory process (Wikipedia, 2024).

With regard to Turkey, incorporating nursery rhymes as part of English lessons could be of great value. The socio-cultural questions surrounding teaching and learning the language in a foreign language context, calls for a fresh implementation of the material. There exists considerable supporting literature that utilizing nursery rhymes not only falls in line with young learners' learning needs, but are also used to motivate them further in their language learning.

Objectives and Research Questions

Gaps within the literature, was the motivation for the current study to investigate whether nursery rhymes could be pedagogically effective in an EFL context. Because songs are so multifaceted, they can be used for a variety of educational purposes in the learning of EFL. For example, it has been found that songs "can invite a greater degree of interaction and engagement in vocabulary learning" (Li, Brand, 2019), thus promoting learning. Hill (2013) claims "they bring images of reality into the unnatural world of the language classroom". Furthermore, the incorporation of visuals alongside songs can add an element of enjoyment to the classroom, facilitating a more relaxed atmosphere for learners. This environment encourages students to acquire new vocabulary with increased self-confidence and reduced anxiety when listening to nursery rhymes (Eccles et al., 2011).

Consequently, this research aims to:

1. Investigate the effect of using nursery rhymes in the classroom on enhancing young learners' vocabulary performance.
2. Examine the impact of nursery rhymes on children's motivation to learn vocabulary.
3. Explore potential differences between male and female learners in acquiring a foreign language vocabulary.

The following research question is intended to be addressed by this study:

– To what extent do nursery rhymes effect vocabulary performance and motivation of young Turkish male and female EFL learners?

The following hypothesis has been proposed to investigate this question:

– Nursery rhymes have no beneficial effects on the vocabulary performance or motivation of young Turkish EFL learners, and there is no discernible difference in the effects of using them in the classroom between male and female learners.

2. Methodology

The purpose of this study is to look into how nursery rhymes affect young Turkish EFL learners in terms of vocabulary development. Pretest, treatment, and posttest phases are all part of the quasi-experimental design used as the methodological framework in this investigation. Nursery rhymes are the independent variable, whereas vocabulary expansion is the dependent variable in this case.

Participants and Setting

A total of 40 beginner nursery students participated in the present study. Participants were selected through a non-random convenience sampling technique. All were native speakers of Turkish and ranged in age from 4 to 6 years. The sample was divided into two groups of 20 students each. To ensure gender balance, each group was composed of 10 male and 10 female students, thereby providing an equal representation of both genders across the study. The deliberate inclusion of an equal number of boys and girls was intended to control for potential gender-based differences in early language learning and classroom engagement, thereby enhancing the validity and generalizability of the findings.

Following main tools were utilized in this study to collect data:

Vocabulary Pre-Test and Post-Test: To compare the knowledge of EFL learners before to and following the nursery rhyme intervention, the researcher used vocabulary tests as methodological tools. The researcher's chosen and created nursery rhyme vocabulary served as the basis for both the pre-test and post-test. To make sure that all participants were at the same academic level and to guarantee learner homogeneity, the pre-test was given at the beginning of the semester. After that, the participants were split up into two groups: the experimental group, which was taught language through nursery rhymes, and the control group, which was taught vocabulary through traditional methods. A post-test was done at the end of semester to all students to evaluate the effect of nursery rhymes on vocabulary acquisition.

Nursery Rhymes: Twelve nursery rhymes were chosen as essential vocabulary-building resources. Throughout the teaching process, these rhymes provided fundamental support resources with the goal of enhancing the students' vocabulary via interesting and relevant content.

Interview: After vocabulary training and tests, learners' views regarding the usage of nursery rhymes were evaluated by asking questions chosen from a motivation questionnaire (Deci et al., 1991) because the children were illiterate. These items, which comprised many motivation-related statements, were selected from the questionnaire developed by Deci et al. (1991). With no right or wrong response, learners were invited to express their ideas regarding these claims, enabling sincere reflections on their experiences with the teaching methodology.

Procedure

This research was done in a public nursery school during the first semester of the academic year. A quasi-experimental pretest-treatment-posttest design was used. Since the vocabulary knowledge of their existing vocabulary was important for the study to be meaningful to tutorial and researcher alike, both groups took a pretest before being nonrandomly assigned to an experimental and control group. The participants were Turkish speaking, all were born in this country, were from Turkish-speaking families, and spoke English competently, aged from 4 to 6 years.

The researcher personally designed the vocabulary test, and the experimental group was taught by introducing nursery rhymes into the instructional materials in the class. Before

presenting any of the inferential null hypothesis statistical tests of significance or any appropriate descriptive tests, the Kolmogorov-Smirnov test demonstrated that, in general, the data met the parametric assumptions. A posttest was administered to both groups and the results compared.

Additionally, in the last week of the semester, an interview with items from the motivation questionnaire (Deci et al., 1991) was conducted to examine the learners' attitudes toward the learning of nursery rhymes in the classroom. To ensure clarity in equations and responses, the interview was held in the students' mother tongue.

The experimental group having been exposed to the nursery rhyme instruction, but both groups took the post-test and the participants of the experimental group were asked the interview questions to test their attitudinal disposition to the use of nursery rhyme as a learning activity. The researcher controlling all aspects of the study with great dexterity, from the pretest for the homogeneity of participant, through the interview questions and the post-test to conducting nursery rhyme instruction and deciding what materials to use, implicitly ensured internal validity.

3. Results

The descriptive measures for the experimental and control groups' vocabulary performance during the pretest and posttest phases are summarized in the following table.

Statistical Analysis

Prior to hypothesis testing, the normality of all continuous variables (pre-test and post-test vocabulary scores, as well as motivation scores) was examined using the Kolmogorov-Smirnov test, which confirmed that the data met the assumption of normal distribution ($p > .05$ for all variables). Homogeneity of variances between groups was assessed with Levene's test, the results of which are presented in Tables 2, 4, and 6. Because the assumptions of normality and homogeneity were satisfied, independent-samples t-tests were conducted to compare mean scores between the experimental and control groups, as well as between male and female participants. A two-tailed significance level of $\alpha = 0.05$ was adopted for all analyses. Descriptive statistics (means, standard deviations, minimum, and maximum scores) are reported alongside inferential statistics to provide a comprehensive interpretation of results.

Table 1. Descriptive Data on the Vocabulary Performance of the Participants

Groups	Number	Test phase	Mean	St. d	Minimum	Maximum
Control	20	Pretest	5.7	1.5	4.00	10.00
	20	Posttest	9.8	1.7	6.00	12.00
Experimental	20	Pretest	5.8	2.1	4.00	10.00
	20	posttest	12.6	1.6	8.00	15.00

The vocabulary performance differences between participants in the nursery rhyme and control groups were assessed using an independent t test. Table 1 shows that both the experimental and control groups' mean of vocabulary performance scores increased from the pretest to the posttest.

Table 2. Independent T-Test on Comparing the Vocabulary Performance

Levene's test		T-Test for Equality of Means				
F	Sig	T	Sig. (2-tailed)	Df	Mean Difference	Std. Error Difference
0.004	.94	-5.3	.001	38	-2.8	0.5

According to the statistical data in the above table, the vocabulary performance mean scores of the participants in the nursery rhyme and control groups differed by 0.05 at the significant level ($t = -5.3$, $df = 38$, $p = .001 > 0.05$).

The findings of the aforementioned independent t-test demonstrate that the use of nursery rhymes in the classroom significantly affects students' vocabulary proficiency.

The interviewees' answers were examined using an additional independent t-test, which measured the motivational differences between the experimental and control groups.

As the above table depicts there are differences in mean scores of motivation in control and experimental groups. Mean scores of motivation in the experimental group are higher than the control group.

Table 3. Descriptive Statistics on Participant's Motivation

Groups	Number	Mean	Std. Deviation
Control	20	63.5	2.4
Experimental	20	84.1	2.0

Table 4. Independent T-Test for Motivation of Two Groups

Levene's test		t-test for Equality of Means				
F	Sig	T	Sig. (2-tailed)	Df	Mean Difference	Std. Error Difference
1.5	.22	-6.5	.001	38	-20.6	3.1

The results in [Table 4](#) indicate that the difference between the motivation scores of the two groups was statistically significant ($t = -6.5$, $df = 38$, $p < .05$). These findings demonstrate that the use of nursery rhymes significantly enhanced learners' motivation to acquire new vocabulary.

The disparities in vocabulary performance between male and female EFL learners were also assessed using an independent-samples *t*-test.

Table 5. Descriptive Statistics of Male and Female Participants' Vocabulary Performance

Groups	Number	Mean	Std. Deviation
Males	20	11.1	1.7
Females	20	11.2	2.6

As seen in [Table 5](#), the mean vocabulary scores for females were slightly higher than those of males.

Table 6. Independent T-Test- Scores of Vocabulary Performances for Males and Females

Levene's test		t-test for Equality of Means				
F	Sig	T	Sig. (2-tailed)	Df	Mean Difference	Std. Error Difference
.08	.75	-.17	.84	38	-.12	0.70

The results presented in [Table 6](#) indicate no statistically significant difference between male and female learners in terms of vocabulary performance ($t = -0.17$, $df = 38$, $p > .05$). This suggests that learners' gender did not influence their vocabulary proficiency in this study.

Overall, the statistical analyses revealed three major findings. First, the experimental group that received nursery rhyme-based instruction demonstrated significantly greater vocabulary gains than the control group, confirming the positive effect of music-integrated pedagogy on lexical development. Second, learners in the experimental group reported significantly higher motivation to learn new vocabulary, suggesting that nursery rhymes not only facilitate cognitive processing but also foster a more engaging and enjoyable learning environment. Finally, no significant difference was found between male and female participants' vocabulary scores, indicating that the effectiveness of nursery rhyme-based instruction was consistent across genders.

4. Discussion

Giving low-level pupils a wider vocabulary in an effective manner is still a major difficulty for teachers of young students. There are other ways to explain or demonstrate word meanings, however the current study concentrated on how well Turkish EFL young learners learned English vocabulary through the use of nursery rhymes. It was predicted that vocabulary performance would

improve with the use of nursery rhymes. The data analysis's findings showed that nursery rhymes significantly impacted EFL learners' vocabulary growth. The experimental group, which used nursery rhymes to teach vocabulary, fared noticeably better than the control group, which used conventional teaching techniques. This supports recent findings indicating that nursery rhymes are a potent tool for enhancing vocabulary development in young learners (Fitria, 2023).

Considering that both groups had a similar vocabulary knowledge base at the onset, the higher scores obtained from the post-test by the experimental group attest to the specific value of nursery rhymes in improving vocabulary learning. This must have something to do with the emotions encouraged by this rhythmic form of speech, as the most recent research confirms that infants listen to rhythmically spoken words (songs and nursery rhymes) to learn about word boundaries, even as newborns, as well as helping enhance phonemic awareness (University of Cambridge, 2023). Moreover, studies in EFL contexts show that song-based activities meaningfully boost vocabulary acquisition among young learners (Nikolovska, 2018).

Pictures and illustrations help clarify new words. Known as dual-coding theory, our visual and verbal memory are different pathways that aid in retaining information (Miller, 2024). Studies show the benefit of visuals; specifically, using educational programs involving graphics and dual-coding significantly helps vocabulary learning while improving overall academic success (Mir et al., 2023).

Nursery rhymes already provide words set in music and story. Pairing language with melody and movements brings greater understanding and memory of vocabulary and connects with modern ideas such as Melodic Learning theory which proposes that learning with the patterns of melody, rhythm, and rhyme leads to better storage and retrieval of information- think of the alphabet song as a prime example (Wikipedia, 2024).

A positive, friendly, low-anxiety classroom environment is also conducive to learning. Songs and rhymes can act to reduce affective filters (lowering anxiety, raising motivation and engagement), as described in Krashen's Affective Filter Hypothesis. Most recently, song-based and TPR (Total Physical Response) methods "lead to improvements in receptive and productive vocabulary" in young EFL students (Magnussen, Sukying 2021).

In addition, the benefits of using songs and rhymes for learning vocabulary have been substantiated in several recent studies. In Oman, Victorian nursery rhymes were found to aid the memorizing, understanding, and retaining of words in kindergarten pupils (Rajan, Saadat, 2025). A meta-analysis of song-based intervention in young second- or foreign language learners also endorses this tool, showing a favourable effect on vocabulary acquisition (Acar, Çetin, 2025).

In conclusion, the use of nursery rhymes for vocabulary enhancement can give language teachers "environmental" pedagogical tools, and by engaging emotions and combining some multi-sensory learning (auditory, visual, motor), while also offering low-anxiety social learning contexts promote meaningful, long-storage vocabulary attainment. Even considering the Turkish sociocultural/educational background, which is likely to make the learners a receptive target audience, nursery rhymes may help reaching and enticing language learning goals for non-native language learners.

5. Conclusion

This study has revealed that nursery rhymes can be of great value in teaching vocabulary to young EFL Turkish learners, that they make a positive effect on vocabulary performance and learners' motivation in contrast to their being taught in an ordinary way. The experimental group learnt better vocabulary words exposed to nursery rhymes compared to the control group. It has been proved that songs and rhythmic strongly attracted learners' attention. Also nursery rhymes are sung to a pleasant melody and accompanied by pictures, nursery rhymes create a low-anxiety, fun-filled atmosphere in which children freely participate and remember the songs they play.

Moreover, results support the idea that music facilitation, by way of nursery rhymes, assists the creation of an emotionally conducive climate which lowers a level of anxiety and in turn increases confidence. The increased motivation of participants from the experimental group as compared to the control group seems to back this idea as nursery rhymes appear to have the ability to motivate. No gender differences were found in vocabulary, and boys and girls both showed improvement through the exposure of a nursery rhyme method.

These findings support those well-known theories of L2 acquisition such as Krashen's Affect Filter Hypothesis and Paivio's Dual Coding Theory which talk about the importance of infusing emotion into the learning environment, and appealing to multiple senses in the process of learning.

With positive effects recorded as a result of infusing nursery rhymes into the vocabulary lessons, we encourage teachers to “go for it” and try this kind of work in the hope that it will “sweeten” the pill of memorization. In summary, the use of nursery rhymes offers a promising and enjoyable strategy for language educators aiming to boost vocabulary acquisition and motivation in young EFL learners. Further studies should be done on the permanent gain of this mode, and how far back in our culture it can be used into whatever cultures and school systems will adopt it.

Implications, Suggestions, and Limitations

As Thornbury (2002) states, “without grammar very little can be conveyed, without vocabulary nothing can be conveyed”. While much research has been done into the role of other factors in vocabulary development, this study highlights the important role of nursery rhymes on vocabulary development and language learning motivation, whilst also taking the learners’ sex into account.

The findings offer several pedagogical implications:

The above findings have some implications for the teaching process as noticed below:

1. Vocabulary enrichment. As vocabulary teaching is difficult for foreign language teachers, L2 teachers can effectively and enjoyably surmount this dilemma by injecting pleasurable songs and humorous visuals, thus stimulating students’ interest in vocabulary learning.

2. Curriculum content. Foreign language institutes can encourage students in their vocabulary study through improving lesson plans by adding pleasurable songs and humorous visuals.

3. Teaching materials. Since music has significant effects on vocabulary learning, material writers, curriculum planners and syllabus designers of L2 text books should also add nursery rhymes with related song and interesting visuals.

4. Parents can practise the songs with their children further strengthening the imitative attempts in school in the home.

To build upon the findings of this study, several lines for future research are suggested:

1. Broader participant demographics: We conducted our study with very beginning learners, but similar studies could be done with students at different levels to see if nursery rhymes provide similar therapeutic benefits across ages, while controlling for gender.

2. Larger sample sizes: Re-creating our research with more participants to see if our findings are replicated leads to a more applicable study.

3. Other language skills: Studies on the impact nursery rhymes have on teaching other areas of language, such as grammar, listening comprehension, or pronunciation, could be informative.

4. Age: Exploring the effectiveness of nursery rhymes with learners of different ages could provide insights into age-specific strategies for vocabulary learning.

Limitations of the Study

Although the results provide useful evidence concerning the effect of nursery rhyme-based vocabulary instruction, there are several caveats to bear in mind. First, the students were selected using convenience sampling, which may limit the implications of the results for larger populations of young EFL learners. In addition, the relatively small sample and short treatment may not be sufficient to approximate the long-term effects of nursery rhymes. Other avenues of future research should include larger random samples, and longitudinal designs.

References

Acar, Çetin, 2025 – Acar, İ., Çetin, H. (2025). The Effect of Song-Based Instruction on High School Students’ English Pronunciation Skills: A Time-Series Design. *Gazi Eğitim Fakültesi Dergisi*. 45(2): 605-621. DOI: <https://doi.org/10.17152/gefad.1741999>

Alhazmi, 2024 – Alhazmi, K. (2024). The effect of multimedia on vocabulary learning and retention. *World Journal of English Language*. 4(6). DOI: <https://doi.org/10.5430/wjel.v14n6p390>

Aslan, 2024 – Aslan, P. (2024). The role of morphological awareness and background knowledge in Turkish EFL learners’ writing ability. *PASAA*. 68: 272-302.

Bolduc, Lefebvre, 2012 – Bolduc, J., Lefebvre, P. (2012). Using nursery rhymes to foster phonological and musical processing skills in kindergarteners. *Creative Education*. 3: 495-502. DOI: [10.4236/ce.2012.34075](https://doi.org/10.4236/ce.2012.34075)

Chen et al., 2024 – Chen, M., Mohammadi, M., Izadpanah, S. (2024). Language learning through music on the academic achievement, creative thinking, and self-esteem of the English as a foreign language (EFL) learners. *Acta Psychologica*. 247(104318). DOI: <https://doi.org/10.1016/j.actpsy.2024.104318>

- Chomsky, 1982** – Chomsky, N. (1982). Some concepts and consequences of the theory of government and binding. MIT Press.
- Deci et al., 1991** – Deci, E.L., Vallerand, R.J., Pelletier, L.G., Ryan, R.M. (1991). Motivation and Education: The Self-Determination Perspective. *The Educational Psychologist*. 26: 325-346. DOI: <http://dx.doi.org/10.1080/00461520.1991.9653137>
- Eccles et al., 2011** – Eccles, R., van der Linde, J., le Roux, M., Holloway, J., MacCutcheon, D., Ljung, R., Swanepoel, D.W. (2021). Effect of music instruction on phonological awareness and early literacy skills of five- to seven-year-old children. *Early Child Development and Care*. 191(12): 1896-1910. DOI: <https://doi.org/10.1080/03004430.2020.1803852>
- Ellis, 2017** – Ellis, R. (2017). Understanding second language acquisition (2nd ed.). Oxford University Press.
- Fitria, 2023** – Fitria, T.N. (2023). Using Nursery Rhymes in Teaching English for Young Learners at Childhood Education. *Athena*. 1(2): 58-66. DOI: <https://doi.org/10.58905/athena.v1i2.28>
- Folse, 2016** – Folse, K.S. (2016). The importance of vocabulary in language learning and teaching. *TESOL Quarterly*. 50(2): 321-343. DOI: <https://doi.org/10.1002/tesq.324>
- Hamilton, 2024** – Hamilton, C., Schulz, J. Chalmers, H., Murphy, V. (2024). Investigating the substantive linguistic effects of using songs for teaching second or foreign languages to preschool, primary and secondary school learners: A systematic review of intervention research. *System*. 124. DOI: <https://doi.org/10.1016/j.system.2024.103350>
- Heilman, 1990** – Heilman, P. (1990). The role of nursery rhymes in language development. *Early Childhood Education Journal*. 18(3): 27-34.
- Hill, 2013** – Hill, D.A. (2013). The visual elements in EFL coursebooks. In B. Tomlinson (Ed.), *Developing materials for language teaching* (2nd ed.) (pp. 158-166). London: Bloomsbury.
- Karatas et al., 2021** – Karatas, N.B., Özemir, O., Lovelett, J.T., Demir, B., Erkol, K., Verissimo, J., Erçetin, G., Ullman, M.T. (2021). Improving second language vocabulary learning and retention by leveraging memory enhancement techniques: A multidomain pedagogical approach. *Language Teaching Research*. 29(1): 112-149. DOI: <https://doi.org/10.1177/13621688211053525>
- Koelsch, 2025** – Koelsch, S. (2025). Music and Language in the Brain. *Good Vibrations: Unlocking the Healing Power of Music*. Cambridge University Press. Pp. 28-38.
- Krashen, 1985** – Krashen, S.D. (1985). The input hypothesis: Issues and implications. Longman.
- Li, Brand, 2019** – Li, X., Brand, M. (2009). Effectiveness of Music on Vocabulary Acquisition, Language Usage, and Meaning for Mainland Chinese ESL Learners. *Contributions to Music Education*. 36: 73-84.
- Lozanov, 1978** – Lozanov, G. (1978). Suggestology and Outlines on Suggestopedya. Gordon and Breach, New York.
- Ludke et al., 2013** – Ludke, K., Ferreira, F., Moro, S. (2014). Singing can facilitate foreign language learning, *Mem Cogn*. 42: 41-52. DOI: 10.3758/s13421-013-0342-5
- Magnussen et al., 2021** – Magnussen, E.S., Sukying, A. (2021). The Impact of Songs and TPR on Thai Preschoolers' Vocabulary Acquisition. *Thaitesol Journal*. 34(1). [Electronic resource]. URL: <https://files.eric.ed.gov/fulltext/EJ1304648.pdf>
- Miller, 2024** – Miller, S. (2024). What is dual coding theory and why is it useful for language learners and teachers? *Sandy Millin Blog*. [Electronic resource]. URL: <https://sandymillin.wordpress.com/2024/07/22/what-is-dual-coding-theory>
- Mir et al., 2023** – Mir, K.J., Fatima, D.S., Fatima, D.S. (2023). Impact of Dual Coding Strategy to Enhance Students' Retention of Scientific Concepts in Middle Schools. *Annals of Human and Social Sciences*. DOI: 10.35484/ahss.2023(4-iv)63
- Nation, 2018** – Nation, I.S.P. (2018). Learning Vocabulary in Another Language. Cambridge: Cambridge University Press.
- Neithanantan, Hua, 2023** – Neithanantan, P., Hua, T.K. (2023). Songs as vocabulary booster for young learners. *International Journal of Academic Research in Progressive Education and Development*. 12(2): 1818-1832. DOI:10.6007/IJARPED/v12-i2/17496
- Paivio, 2007** – Paivio, A. (2007). Mind and its evolution: A dual coding theoretical approach. Erlbaum Associates Publishers.
- Pastuszek-Lipińska, 2025** – Pastuszek-Lipińska, B. (2025). The role of musical aspects of language in human cognition. *Front. Psychol*. 16: 1505694. DOI: 10.3389/fpsyg.2025.1505694

- [Pavia et al., 2019](#) – Pavia, N., Webb, S., Faez, F. (2019). Incidental vocabulary learning through listening to songs. *Studies in Second Language Acquisition*. 41(4): 745-768. DOI: 10.1017/S0272263119000020
- [Rajan, Saadat, 2025](#) – Rajan, S.K., Saadat, U. (2025). An experimental study on using rhymes to build English vocabulary among kindergarten pupils in Bousher, Oman. *SSRN*. [Electronic resource]. URL: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5345459
- [Salcedo, 2010](#) – Salcedo, C.S. (2010). The Effects of Songs in the Foreign Language Classroom on Text Recall, Delayed Text Recall and Involuntary Mental Rehearsal. *Journal of College Teaching & Learning*. 7(6): 1930.
- [Thornbury, 2002](#) – Thornbury, S. (2002). How to teach vocabulary. Harlow: Longman.
- [Topal, 2024](#) – Topal, I.H. (2024). Language learning through music: A critical review of Lirica. *Technology in Language Teaching & Learning*. 6(2): 1500. [Electronic resource]. URL: <https://www.lirica.io/> DOI: <https://doi.org/10.29140/tl.v6n2.1500>
- [University of Cambridge, 2023](#) – University of Cambridge. Why reading nursery rhymes and singing to babies may help them to learn language. Cambridge University Research News. 2023.
- [Webb, Nation, 2017](#) – Webb, S., Nation, P. (2017). How vocabulary is learned. Oxford University Press.
- [Wikipedia contributors, 2024](#) – Wikipedia contributors. Melodic learning. Wikipedia. 2024. [Electronic resource]. URL: https://en.wikipedia.org/wiki/Melodic_learning
- [Winter, 2010](#) – Winter, D. (2010). Using rhyme and rhythm to improve language retention. *Language Learning Journal*. 58(2): 89-104.
- [Zainol Abidini et al., 2008](#) – Zainol Abidini, N., Fatahi, M., Rezaei, S. (2008). The effectiveness of using nursery rhymes in the EFL classroom: A study of young learners. *International Journal of Applied Linguistics*. 18(4): 134-152.