



**UNIVERSIDAD ESTATAL PENÍNSULA DE SANTA ELENA  
SCHOOL OF EDUCATION AND LANGUAGES  
PEDAGOGY OF NATIONAL AND FOREIGN LANGUAGES**

**“MUSIC AND RHYTHM IN NEUROSENSORY CLASSROOM FOR DEVELOPMENT  
OF LISTENING SKILLS IN VERY YOUNG LEARNERS”**

**RESEARCH PROJECT**

As a prerequisite to obtain a:

**BACHELOR’S DEGREE IN PEDAGOGY OF NATIONAL AND  
FOREIGN LANGUAGES**

**Authors:** Eugenio Vera Dayana Lisbeth

Ramirez Blaschke Kevin Hernan

**Advisor:** Limones Borbor Verónica. MSc.

**La Libertad – Ecuador**

**2025**

La Libertad, 11 de julio de 2025

### **ADVISOR'S APPROVAL**

In my role as Advisor of the research paper entitled **“MUSIC AND RHYTHM IN NEUROSENSORY CLASSROOM FOR DEVELOPMENT OF LISTENING SKILLS IN VERY YOUNG LEARNERS”** prepared by **EUGENIO VERA DAYANA ELIZABETH, & RAMIREZ BLASCHKE KEVIN HERNAN** an undergraduate student of the Pedagogy of National and Foreign Languages Major, at School of Educational Sciences and Languages at Universidad Estatal Peninsula de Santa Elena, I declare that after oriented, studied and reviewed the project, I approve it in its entirety, because it meets the requirements and is sufficient for its submission to the evaluation of the academic tribunal.

**Sincerely,**



---

**LIC. VERONICA JULIETA LIMONES BORBOR MSc.  
ADVISOR**

## Statemen of Authorship

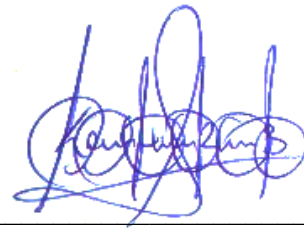
We, DAYANA LISBETH EUGENIO VERA, with ID number 2400397473, and KEVIN HERNAN RAMIREZ BLASCHKE, with ID number 1900740059, undergraduate students from Universidad Estatal Península de Santa Elena, School of Education Science and Languages, as a prerequisite to obtaining a bachelor's degree in Pedagogy of National and Foreign Languages in our role as authors of the research project “MUSIC AND RHYTHM IN NEUROSENSORY CLASSROOM FOR DEVELOPMENT OF LISTENING SKILLS IN VERY YOUNG LEARNERS”, certify that this study work is our authorship, except for quotes, statements, and reflections used in the research paper



---

Eugenio Vera Dayana Lisbeth

**AUTHOR**



---

Ramirez Blaschke Kevin Hernan

**AUTHOR**

## Declaration

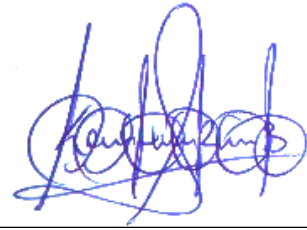
The information and content in this degree and research work are the responsibility; the intellectual property belongs to Universidad Estatal Península de Santa Elena.

*Dayana Eugenio*

---

Eugenio Vera Dayana Lisbeth

**AUTHOR**



---

Ramirez Blaschke Kevin Hernan

**AUTHOR**

**BOARD OF EXAMINER**



Ing. Eliana Geomar Leon Abad, MSc.

**PEDAGOGY OF NATIONAL  
AND FOREIGN LANGUAGE  
MAJORS DIRECTOR**



Ing. Sandra Caamaño Lopez, MSc.

**SPECIALIST PROFESSOR**



Lic. Veronica Limones Borbor, MSc.

**ADVISOR**



Lic. Rudy Parraga Solorzano, MSc.

**UIC PROFESSOR**

### **Acknowledgment I**

I thank God for being my constant guide and strength throughout this journey. To the Universidad Península de Santa Elena, thank you for nurturing my academic and personal growth. To my professors, especially Miss Eliana León, Miss Verónica Limones, and Miss Sandra Caamaño, I am deeply grateful for your dedication and the lasting impact you've made on my education. To my dear friends, thank you for your unwavering support, sincere companionship, and presence through every stage of this process.

-Dayana Lisbeth Eugenio Vera

### **Acknowledgment II**

First of all, I want to thank God for granting me wisdom, strength, and perseverance throughout this academic journey. His guidance has been essential every step of the way.

I am deeply grateful to my mother, who, with love and dedication, supported me unconditionally. I also thank my partner, who motivated me every day to keep going, and my classmates, who became true friends and shared with me both challenges and achievements. Finally, I extend my gratitude to my professors for their valuable knowledge and dedication throughout these years.

-Kevin Hernan Ramirez Blaschke

## **Dedication I**

To my mom, Flor Vera, and my older sister, Erika, for always being there for me, for supporting me through everything, and for being my greatest examples of strength and love. To Jess, thank you for your patience, your love, and for walking beside me during this chapter of my life. To my best friends, Kevin Ramírez and Josué Barahona, thank you for making me laugh in every class, for encouraging me to keep going, and for always being by my side. To my 10-year-old self—yes, you did it. You kept dreaming, you didn't give up, and you went further than you ever imagined. And to my dear Aunt Mary, who is no longer with us, but lives on in my heart. This achievement is for you, because you inspired me, believed in me, and your love still guides me. I dedicate this dream to you, with all my love.

With love, Dayana Lisbeth Eugenio Vera

## **Dedication II**

I lovingly dedicate this thesis to my family, to my mom, Jhaselt Blaschke, for being my greatest source of strength and unconditional love; to my brothers, Josua Escobar and Zack Blaschke, for always believing in me and encouraging me every step of the way; and to my partner, Arturo Figuera, whose love, constant support and daily motivation reminded me why I started and why I should never give up. To my classmates, who turned long days into unforgettable memories and always offered words of encouragement when we needed them most. And to my two beloved kitties, Mortadela and Sammy, who stood by my side through nights of endless studying and homework, giving me comfort without saying a word. This achievement is ours, and I hold each of you in my heart with deep love and gratitude.

With love, Kevin Hernan Ramirez Blaschke

## **Abstract**

This study explores the role of music and rhythm in the development of listening skills among very young learners in neurosensory classrooms. It emphasizes the importance of integrating musical strategies as effective tools to support attention, memory, and auditory comprehension in early education. The research collected qualitative data through open-ended interviews with early childhood educators, aiming to understand their perceptions and experiences in applying musical activities within inclusive learning environments.

The findings suggest that music and rhythm not only enhance children's listening skills but also contribute to language development, emotional regulation, and social interaction. Through repeated songs, body movements, and rhythmic games, children showed improvements in attention span, instruction following, and expressive language. Despite some challenges, such as a lack of resources or sensory adaptations, teachers highlighted the transformative impact of music when used with intention and flexibility. This research supports the continued implementation of musical practices as inclusive strategies to foster auditory and linguistic development in early childhood education.

**Key words:** Music, rhythm, listening skills, early childhood, neurosensory education, qualitative research.

## Resumen

Este estudio explora el papel de la música y el ritmo en el desarrollo de las habilidades de escucha en niños pequeños dentro de aulas neurosensoriales. Se destaca la importancia de integrar estrategias musicales como herramientas efectivas para apoyar la atención, la memoria y la comprensión auditiva en la educación inicial. La investigación recolectó datos cualitativos a través de entrevistas abiertas con docentes de educación infantil, con el objetivo de conocer sus percepciones y experiencias al aplicar actividades musicales en entornos inclusivos de aprendizaje.

Los hallazgos sugieren que la música y el ritmo no solo fortalecen las habilidades auditivas de los niños, sino que también contribuyen al desarrollo del lenguaje, la regulación emocional y la interacción social. A través de canciones repetitivas, movimientos corporales y juegos rítmicos, los niños demostraron mejoras en su capacidad de atención, seguimiento de instrucciones y expresión verbal. A pesar de algunos desafíos como la falta de recursos o la necesidad de adaptaciones sensoriales, los docentes destacaron el impacto transformador de la música cuando se aplica con intención y flexibilidad. Esta investigación respalda la implementación continua de prácticas musicales como estrategias inclusivas para fomentar el desarrollo auditivo y lingüístico en la educación infantil.

**Palabras clave:** Música, ritmo, habilidades de escucha, primera infancia, educación neurosensorial, investigación cualitativa.

## INDEX

<b>ADVISOR'S APPROVAL</b> .....	2
<b>Statemen of Authorship</b> .....	3
<b>Declaration</b> .....	4
<b>BOARD OF EXAMINERS</b> .....	5
<b>Acknowledgment I</b> .....	6
<b>Acknowledgment II</b> .....	6
<b>Dedication I</b> .....	7
<b>Dedication II</b> .....	7
<b>Abstract</b> .....	8
<b>Resumen</b> .....	9
<b>INDEX</b> .....	10
<b>Introduction</b> .....	13
<b>Chapter I</b> .....	15
<b>The Problem</b> .....	15
<b>Research Topic</b> .....	15
<b>Title of project</b> .....	15
<b>Problem Statement</b> .....	15
<b>Justification</b> .....	18

<b>Problem question</b> .....	19
<b>General Question</b> .....	19
<b>Specific questions</b> .....	19
<b>Objective</b> .....	19
<b>General Objective</b> .....	19
<b>Specific Objectives</b> .....	19
<b>Chapter II</b> .....	21
<b>Theoretical Framework</b> .....	21
<b>Background</b> .....	21
<b>International Background</b> .....	21
<b>Regional and Local Background (Ecuador)</b> .....	22
<b>Pedagogical basis</b> .....	23
<b>Theoretical basis</b> .....	23
<b>Legal basis</b> .....	24
<b>Definitions</b> .....	24
<b>Chapter III</b> .....	26
<b>Methodological Framework</b> .....	26
<b>Research Method</b> .....	26
<b>Type of Research</b> .....	26
<b>Data Collection Technique</b> .....	27

<b>Instruments.....</b>	<b>27</b>
<b>Data Collection Procedure and Resources.....</b>	<b>28</b>
<b>Population and Sample.....</b>	<b>28</b>
<b>Chapter IV.....</b>	<b>30</b>
<b>Analysis of Findings.....</b>	<b>30</b>
<b>Brief explanation of the findings. ....</b>	<b>30</b>
<b>Interpretation of Bibliographic Review .....</b>	<b>30</b>
<b>Chapter V.....</b>	<b>40</b>
<b>Conclusions and recommendations .....</b>	<b>40</b>
<b>Conclusion .....</b>	<b>40</b>
<b>Recommendation.....</b>	<b>40</b>
<b>Annexes .....</b>	<b>49</b>
<b>Annex A: .....</b>	<b>49</b>
<b>Annex B.....</b>	<b>51</b>
<b>Annex C.....</b>	<b>53</b>
<b>Annexes D .....</b>	<b>57</b>
<b>Annexes E .....</b>	<b>61</b>

## Introduction

Developing listening skills is a basic support in early childhood education for general language acquisition and communication. Children are especially open to sensory experiences that shape their cognitive and linguistic development during the formative years between three and five. Integrating music and rhythm in the neurosensory classroom has become more relevant in recent times. Through sound patterns and motion, these components cause the brain to react, therefore helping young students to process auditory input. Among preschool-aged children in Ecuador, where inclusive and multisensory teaching is increasingly encouraged, non-conventional educational methods that encourage auditory attention, memory, and language understanding still have need of investigation.

Music and rhythm offer a systematic yet adaptable way of involving children's hearing systems, so providing significantly more than simply pleasure. Along with strengthening sound discrimination and vocabulary retention, repetition, rhythm, and melodic patterns encourage emotional regulation and social interaction. Created to match the individual sensory demands of every pupil, neurosensory classrooms provide the ideal environment for such musical endeavors to thrive. Although their potential, few studies in the Ecuadorian context have completely looked at how these tools are being used in actual early childhood settings.

Hence, this study aims to find the advantages of combining music and rhythm in a neurosensory context for the growth of auditory abilities in youngsters aged 3 to 5. Exploring the views and experiences of teachers applying these methods using a qualitative phenomenological approach. This research adds to the expanding body of literature supporting inclusive and multisensory techniques in early education by highlighting their stories. Additionally, it aims to

make people more aware of how sensory-based musical techniques can significantly improve kids' focus, memory, and language development in an interesting manner.

## **Chapter I**

### **The Problem**

#### **Research Topic**

Didactic Resources and Listening Skills Development.

#### **Title of project**

Music and Rhythm in Neurosensory Classroom for Development of Listening Skills in Very Young Learners.

#### **Problem Statement**

The English language is of particular importance in the cognitive development of children, especially during their general training. The initial performance of the English language not only improves communication skills but also increases cultural understanding and global awareness. Due to the natural ability to adopt new information, 5 and 6-month-olds accept the language edition. It is important to develop listening to these young learners because it is primarily felt to be communication and educational success (Yoon, 2020).

Toddlers, even the rowdiest three- or five-year-old, borrow words from whatever bouncing around their heads. When they listen, those scattered sounds turn into sentences, and sentences turn into friends. One low-cost fix sits right in the living room: crank music or tap a beat and see who can't help moving. Rhythm nudges little minds to line up thinking, feeling, talking, walking, and scribbling all at once ( Singapore Teaching Centre, 2022).

In addition, music lessons were discovered to enhance a variety of cognitive skills, including craftsmanship, reading, and executive functions, thus revealing a strong link between

music and neural plasticity. Kids who take music lessons were discovered to have improved memory, attention, and academic performance compared to those who do not, according to research in *Frontiers in Neuroscience* (Artur C Jaschke, 2018). This highlights the possibility of using music and rhythm as useful learning instruments to support and enhance the cognitive development of young learners in general.

Music education has been shown to have benefits in numerous aspects of children's cognition and school skills. A longitudinal study in *Frontiers in Neuroscience* by (Artur C Jaschke, 2018) analyzed the impact of music training on executive cognition in primary grade school children. The results found a long-term influence of music education on cognitive skills such as inhibition and planning, suggesting that these skills can be mediated to introduce the effect of music education on overall academic performance. A recent study published in the *Journal of the Center for Music and Science (CMS)* analyzed how music can benefit language development in children with Developmental Language Disorder (DLD). Children in this study who were exposed to consistent musical rhythms were more prone to repeat sentences, therefore indicating that the perception of musical rhythm may aid in language processing in these youngsters. These results show that integrating musical rhythms and music education are efficient technique to improve cognitive processes and language development in kids, even those with developmental language disorders.

Particularly between the ages of 3 and 5, the development of auditory processing skills is known to be essential for cognitive skills and language acquisition during the early years of life. It is widely regarded that conventional learning approaches in the neurosensory classroom are enough to nurture such competencies. The assumption is that teachers are on board with a program that consumes a significant portion of their college education. Music and rhythm have

shown significant potential to improve auditory attention, memory, and processing in children, according to studies performed both internationally and nationally.

According to Universidad Técnica Particular de Loja (UTPL) study, a model of inclusive music education dubbed VLEM (Virtual Learning Environment for Music) was created to clarify technological didactic resources and pedagogical approaches for enhancing kids' musical skills via creative means. Together with instructors from the SINFIN Music School, students from the Faculty of Basic Education and Information Technology took part in the research. The platform aims to offer tools as interactive games, workshops, or simulators to support traditional teaching and learning and enhance access and educational effectiveness in teaching music to children (Vargas, 2021).

Furthermore, a research project was conducted at the Universidad Técnica de Cotopaxi to analyze the effect of music on childhood learning processes. The study shows that adding music to the classroom is a good way to help students grow and learn. Integrating music activities into the educational process has been proven to considerably enhance students' cognitive abilities, social skills, and communication skills (Fernández Orozco, 2024).

Though the outcomes are encouraging, there is still not enough consistent numerical data to justify the use of music and rhythm in neurosensory learning environments. Moreover, there is still limited knowledge about how these interventions can be adapted to maximize outcomes in diverse learning environments. Specifically, the current work suggests the need to further investigate the quality of music- and rhythm-based interventions to provoke and assess auditory skill acquisition for 3- and 5-year-old children with peripheral or central neurosensory processing compromises (University of Maryland, 2024).

## **Justification**

This project pivots around the use of music and rhythm in learning development (not limited to foreign language learning, but also the general process of cognitive development), considering listening skills in children aged three to five, beyond their mental, emotional, and neurological dimensions. Research has shown that music is a powerful medium that activates areas of the brain associated with hearing, language, and memory. Psychologist Lev Vygotsky raised the point, which (McLeod, 2024) reiterates here, that teaching music to children not only helps them to learn new information, but it also helps them develop holistically in all ways.

The neurological effects of integrated movement and rhythm programs on childhood neurodevelopment, especially age of 3-5 years of life, were researched by (Laure, 2023). Music and rhythm. Can help build children's capacity for following instructions and for more on-task responses to environmental prompts, capabilities necessary for academic success and social interaction. Accordingly, (Magraner, 2021) says that music is a good tool to develop emotional awareness, particularly when listened to live and within shared environments, which helps children to develop emotional intelligence.

Because children are in an important stage of neurodevelopment at this early age and have increased neuroplasticity and sensitivity to sensory input, the study is intended to inform educational practice through the identification of significant pedagogical implications and cognitive benefits of neurosensory stimulation. The results will guide further research and development of early intervention approaches for supporting auditory development and corresponding cognitive gain. The project also aims to support teachers in their delivery of research-based practice in the classroom, intending to contribute to the cognitive, linguistic, and emotional growth of young children.

**Problem question****General Question**

- How does combining music and rhythm in a neurosensory learning environment benefit the development of auditory skills in children aged 3 to 5 years?

**Specific questions**

- How does the use of rhythm in music-based interventions influence the neurosensory processing of auditory information in children aged 3 and 5?
- Which specific auditory skills (e.g., sound attention, auditory memory) are most developed through exposure to music and rhythm-based activities in children aged 3 and 5?
- What is the connection between musical and rhythmic activities and the improvement of language comprehension in 3- and 5-year-old children?

**Objective****General Objective**

- To identify the benefits of integrating music and rhythm in a neurosensory learning environment for the development of auditory skills in children aged 3 to 5 years, by capturing the lived experiences of educators.

**Specific Objectives**

- To define how rhythm-based interventions in music influence neurosensory processing of auditory information in 3- and 5- year- old children.

- To explore the relationship between musical and rhythmic activities to enhance language comprehension in 3- and 5-year-old children.
- To investigate the auditory advantages, such as auditory attention and auditory memory, in 3- and 5-year-old children after music interventions.

## Chapter II

### Theoretical Framework

#### Background

In this study, the theoretical framework is constructed through an analysis of relevant international, regional, and local literature. This research builds theoretical foundations. Particularly concerning their influence on the development of listening abilities in young students (ages 3 to 5), it provides a conceptual lens through which to analyze the role of music and rhythm in neurosensory classrooms and beyond. Built on legal, theoretical, and pedagogical foundations, the structure emphasizes definitions, advantages, and difficulties of music-based methods for young children's schooling.

#### International Background

There are several studies and research papers related to the topic, done internationally. The most relevant are shown below.

(Liulingzi, 2023) A post in the Journal of Modern Learning Development examines multi-sensory music instruction techniques. According to the author, by means of multisensory teaching, including music and rhythm, not only increases creativity and involvement, but also very important in developing young learners' listening abilities. Children who listen, move with, and even picture music automatically have better auditory sensitivity. This approach particularly benefits very young students since it exposes them to rhythmic patterns and melodies that educate their ears to identify tones, speech rhythms crucially important building blocks for effective listening development (Liulingzi, 2023). This goes well with neurosensory classroom techniques, which mix auditory, visual, and tactile components simultaneously.

Moreover, (Ali, 2020) conducted an experimental study on 80 EFL very young learners. The finding showed that incorporating English songs boosted listening comprehension. In fact, "Most of the young learners enjoyed and appreciated learning English through listening to songs."(Ali, 2020). The music didn't just help with remembering vocabulary; it also played a big role in making the classroom feel safe and engaging.

(Barrio, 2024) cited in the same study, states that "songs are advantageous tools and a teacher should take advantage of them during linguistic practice," as cited in (Ali, 2020), which reflects the power of rhythm and melody to reinforce memory and language patterns in early learners.

Dalcroze and Orff methods, as described in (Kodály, 2021) also support music-integrated learning: "Music education should arouse innate instinct, cultivate a sense of rhythm, and promote harmony of body and mind" (Liulingzi, 2023).

### **Regional and Local Background (Ecuador)**

Particularly for its part in promoting inclusive and early learning environments, music in education has been attracting quite a bit of attention lately in Ecuador. According to a 2023 study by (Carrasco, 2022), titled "The Use of Songs as a Methodological Strategy for the Development of Listening Comprehension in English," combining songs into classroom activities can greatly improve listening skills in young pupils enrolled in early education programs. The authors noted that songs for children assist in a significant and pleasurable way in the learning of auditory skills (Vargas, 2023).

Another research from Universidad de Cuenca explores the realm of musical teaching techniques for early education, stressing that 'music is a fantastic way to improve language abilities, motor coordination, and attention in children aged three to five (Cecilia Avila, 2022).

An inclusive music education model, "AVAM", aimed at youngsters with and without disabilities, is discussed in a news piece by (UTPL, 2021). "Music sparks imagination and enhances neural connections from early childhood" (UTPL, 2021) so this project brings together music, technology, and emotion to promote cognitive and emotional development.

### **Pedagogical basis**

Musically, pedagogically, music presents a multisensory experience that fits the learning preferences of young children. According to (Liulingzi, 2023) multisensory teaching involves "visual, auditory, and kinesthetic senses at the same time, reinforcing learning through simultaneous sensory input. This method is particularly effective in children aged 3–5, who learn best through play, repetition, and physical engagement.

(Ali, 2020) Emphasizes that music creates a "safe and natural classroom ethos", which reduces anxiety and promotes active engagement. This is crucial for children who are still developing social and language skills.

### **Theoretical basis**

Constructivist learning theories and educational concepts stressing the need for sensory integration form the basis of this study. Within this framework, according to (Kodály, 2021), the Dalcroze and Orff method is extensively employed. Emphasizing expression, movement, and rhythm, these methods not only improve music education but also stimulate language development, better listening abilities, increase memory recall, mnemonic functioning, and motor coordination. Very young students also benefit from them in terms of attention span, auditory discrimination, and creative thinking development. Additionally, VAKT (Visual, Auditory, Kinesthetic, Tactile) theory, noted by (Liulingzi, 2023) helps the fusion of several

sensory channels to increase general learning results; this enables visual perception, auditory processing, physical awareness, and tactile sensitivity to be simultaneously developed in the learning process.

Moreover, the theory of "Four Senses and Three Layers", referenced in the same article, fits with this study by combining sensory awareness, emotional expression, and musical appreciation in a progressive teaching model (Liulingzi, 2023).

### **Legal basis**

Early childhood classrooms should include artistic expression, music, and rhythm according to the Ecuadorian "Currículo de Educación Inicial" (Ministerio de Educación, 2014). It advances "el desarrollo integral a través del arte, la música, el movimiento y la expresión corporal". This legal structure emphasizes the importance of music for early learners' cognitive, linguistic, and emotional growth as well as for their socialization.

### **Definitions**

- **Neurosensory Classroom:** A learning environment crafted to engage multiple senses, boosting the brain's pathways that are crucial for effective learning.
- **Listening Skills:** The abilities that involve hearing, understanding, and reacting to spoken words, which are vital for developing language.
- **Rhythm:** A rhythmic pattern of sound or movement that aids in memory retention and helps with coordination during the learning process.

### **Advantages**

- Encourages cognitive growth through the use of rhythm and repetition (Liulingzi, 2023).

- Encourages language acquisition and vocabulary retention (Ali, 2020).
- Provides inclusive and emotionally supportive environments (UTPL, 2021).
- Strengthens auditory memory and phonemic awareness (Cecilia Avila, 2022).

### **Disadvantages**

- Requires trained staff and resources not always available in public institutions.
- Cultural adaptation of songs may be necessary to ensure relevance and effectiveness.
- The risk of using songs solely for entertainment without any educational value (Ali, 2020).

### **Importance**

Helping youngsters between 3 and 5 improve their listening skills depends on knowing and using music and rhythm in neurosensory classrooms. Studies from Ecuador and other countries suggest that early language skills and auditory processing might be considerably enhanced by rhythmic learning and weaving in songs. Moreover, the legal and educational systems in Ecuador encourage this approach; therefore, it is not only a top teaching priority but also a crucial component of child growth.

## Chapter III

### Methodological Framework

#### Research Method

This study used qualitative research to dive deep into the perspectives and experiences of teachers who incorporated music and rhythm as teaching tools in neurosensory environments. Understanding complex events, like the emotional, cognitive, and social aspects of how young children developed auditory skills, required a qualitative approach.

According to (Patton, 2020), a qualitative study focused on exploring events in real-life settings through the lens of participants' personal experiences. It stressed depth above width, which is particularly successful in the academic study of human behavior, learning mechanisms, and classroom interactions.

#### Type of Research

This is a phenomenological investigation, a technique developed to investigate the lived experiences of people connected with a specific occurrence. The emphasis here is on how instructors perceived music and rhythm's influence on the neurosensory learning environment. Phenomenology, as described by, helps scientists investigate the core of common experiences and find patterns originating from participants' narratives. This design focused on capturing the nuanced experiences of teachers working with children aged 3 to 5 in neurosensory environments that incorporated auditory stimuli.

### **Data Collection Technique**

The main data collection method of this study was semi-structured, one-on-one interviews, with open-ended questions that encouraged the participant to expand upon their thoughts and ideas in a rich and meaningful context. It provided opportunities to gain perspectives and insights and worked with individuals who are from different perspectives, backgrounds, or instructional realities regarding music integration. Additionally, it helped create a supportive and trusting environment where educators felt comfortable sharing both their achievements and challenges.

### **Instruments**

Designed to explore how instructors used musical activities and their claimed effects on children's listening development, the instrument was a semi-structured questionnaire with ten open-ended questions.

**Type of Questions:** Open-ended.

**Number of Questions:** 10.

**Application Format:** Virtual interviews conducted via Zoom platform.

**Purpose:** This study aimed to shed light on how rhythm and music impact children's auditory processing. This involved examining how teachers assess their students' progress in the classroom and whether the techniques they employed align with the declared learning objectives. This tool sought to collect relevant information while valuing the shared each participant's common experiences.

### **Data Collection Procedure and Resources**

Data collection took place at the Universidad Estatal Península de Santa Elena (UPSE) during the June 2025 academic term, specifically within the neurosensory classroom.

**What:** First-hand testimonies from early education teachers.

**Where:** UPSE neurosensorial classrooms.

**When:** June 2025.

**How:** Virtual interviews conducted via Zoom platform.

**Why:** This process sought to explore how musical and rhythmic activities can shape children's listening skills, focusing on their auditory attention, memory, and comprehension. We will collect this data through hands-on experiences, then transcribe our findings and analyze them thematically. By organizing the information through coding, we can identify trends, build themes, and establish theoretical frameworks that support the goals of our study.

### **Population and Sample**

The focus here is on early childhood educators who integrated music and rhythm into their teaching methods within a neurosensory environment. Five teachers from the UPSE neurosensory classroom make up the sample, which was chosen using a non-probabilistic approach. These participants met important requirements, such as prior experience with music-based instruction and direct interaction with children ages three to five, and they are already knowledgeable about the research topic. This sampling method is appropriate for phenomenological research, as it supported in-depth, focused exploration rather than statistical

generalization. The aim is to uncover shared insights that can inform broader educational practice.

## Chapter IV

### Analysis of Findings

#### **Brief explanation of the findings.**

This chapter offers an analysis of qualitative data acquired from interviews with five early childhood teachers in Santa Elena, Ecuador. This research sought to see how music and rhythm affect the growth of listening ability in neurosensory classrooms for youngsters between 3 and 5. Using a phenomenological approach, the study sought to grasp the lived experiences and viewpoints of participants on the application of musical and rhythmic techniques in their teaching approach.

Ten open-ended questions arranged along with the aims of this study, made up semi-structured interviews used to gather the data. These interviews let the teachers speak freely and provide rich, in-depth tales. By question, the answers were categorized and analyzed in relation to the conceptual framework presented in Chapter II. Furthermore, repeated keywords for every question were discovered to draw attention to common trends among the respondents.

#### **Interpretation of Bibliographic Review**

##### **1. How do you currently incorporate music and rhythm into your classroom activities with 3- to 5-year-old children?**

The instructors interviewed revealed that they often combine music and rhythm via several methods, including songs, rhythmic clapping, dance, and the application of body percussion. Usually included during important points of the classroom schedule, these elements include morning greetings, instructive transitions, and academic content reinforcement. This kind of music integration not only keeps students' interest but also increases classroom

participation. Teachers also stressed how vital it is to utilize known songs or rhythm-based activities can help kids connect more strongly to the learning environment.

(Anabel, 2024) argue that music in neurosensory classes helps multisensory interaction, therefore enabling kids to take up auditory information more effectively. Their research shows that regular exposure to musical patterns improves pupils' capacity to pay attention to verbal input and effectively process it, especially when paired with physical exercise and visual clues that enhance the memory of auditory information.

**2. Since you began integrating music and rhythm into your teaching, what specific changes have you observed in the children's listening skills and auditory attention? Please describe any noticeable improvements in focus, memory, or comprehension.**

The use of rhythm and music was found to dramatically improve children's attention span, ability to follow instructions, and recollection of auditory knowledge. Recurring rhythms were used to improve children's cognitive organization and future activity prediction. Additionally, it was discovered that children were better able to comprehend the material when verbal instructions were delivered in the form of melodic rhythms.

These results concur with those of (Benavides, 2025) who says that rhythm improves auditory memory and neuronal synchrony. Their studies show how regular, rhythm-based training helps the brain's capacity for speech processing by stabilizing attention and enabling students to sustain attention for long durations. In early learning settings, where sustained listening is still developing, this connection between music and auditory attention is particularly advantageous.

**3. Which types of musical activities — such as songs, rhythmic patterns, body movements, or use of instruments — have you found to be most effective in enhancing children’s auditory attention and memory?**

According to the participants, simple percussion instruments like tambourines and maracas, rhythmic body motions like clapping or stamping, and rhythmic songs with repetitive lyrics are among the most efficient musical activities for boosting memory and auditory awareness. These strategies improve the children's capacity to recall auditory sequences as well as make learning fun. Their focus is improved, and they are able to link physical actions with certain sounds thanks to their synchronized movements.

(LaGasse, 2024) say these methods activate brain areas associated with working memory and auditory processing. According to their research, young students' capacity to remember verbal and auditory information is greatly improved by music-based learning activities combining rhythm, melody, and motor coordination. The multisensory input forms neuronal patterns that make recall easier and quicker.

**4. In your experience, how does engagement with music and rhythm influence children’s ability to follow instructions and maintain concentration during lessons?**

Teachers underlined the importance of rhythm in organizing classroom dynamics and boosting instruction retention. Children start to link sound patterns with expected actions by means of regular musical signals, including rhythmic clapping or lyric instructions. Therefore, they show a higher ability to remain focused and finish tasks in order. Teachers also said these activities promote emotional regulation, therefore supporting attention.

This supports (Villegas, 2024), who claim that early learners develop cognitive structure via rhythm. Their research finds that rhythmic cues enable children's grasp of cause-and-effect connections in classroom activities and so help them to internalize everyday actions. Children grow used to these patterns, which helps their executive function to get better and enables them to follow instructions more independently.

**5. Have you noticed any impact of music and rhythm on children's language development? Could you describe these effects?**

All five teachers noted high links between musical involvement and language growth. Particularly, they saw changes in sentence structure, vocabulary growth, and pronunciation. Many once timid youngsters started to use songs to communicate more openly. Repetitive music and lyrics were especially beneficial for strengthening linguistic systems and phonological awareness.

Early exposure to rhythm and melody, according (Arabnia, 2024), improves phonological awareness, a major indicator of language growth. His studies seem to imply that musical exercises assist youngsters break down language into syllables and sounds, hence enhancing understanding and articulation. Early pupils develop expressive and receptive language using music as scaffolding, he finally says.

**6. What emotional and behavioral responses do you usually observe in children during and after music and rhythm activities?**

Among the children, the instructors' reported emotional responses include more excitement, happiness, and friendliness. Music classes inspired kids to play together, openly display feelings, and interact with their classmates. Additionally, teachers observed that pupils

seemed more calm and eager to concentrate on other academic activities following these seminars, therefore fostering a favorable learning environment.

This fits (Savage, 2020), who discovered that music evokes emotional resonance and tightens peer relationships. According to their studies, musical rhythm helps to control emotional conditions and fosters classroom group harmony. Children who are emotionally stable tend to show pro-social behavior and fully engage in cooperative learning projects.

**7. What challenges or difficulties have you encountered when using music and rhythm as tools for teaching listening skills?**

The instructors highlighted some problems: lack of musical resources, time limits, and trouble keeping pupils' focus when music is not well aligned with educational objectives. Still other problems emphasized were the overstimulation of children with increased sensory sensitivities, therefore needing significant teacher modifications.

(Ilar, 2020) notes that a teacher's ability to distinguish instruction has a great bearing on how well music works in the classroom. His results stress the need to pay attention to pupils' responses and adjust the musical activities' pace, volume, and content in real-time to guarantee inclusion. Success in employing music as an instructional tool in varied early childhood environments depends on this adaptive approach.

**8. Do you tailor your musical content or activities to accommodate children's sensory preferences? How do you adapt your approach?**

All interviewed educators said they modify their musical activities depending on the sensory demands and learning approaches of the kids. Some utilize visual aids or paintings together with sound for visual learners, whereas others push tactile involvement through tools for

kinesthetic learners. Variations in volume, rhythm intricacy, and speed are among the typical techniques used to satisfy several sensory levels.

(Benavides, 2025) agree with this as they advocate sensory-inclusive design in early education. Their research emphasizes how important it is for differentiated musical instruction to satisfy the several perceptual needs of pupils. For youngsters with and without sensory processing problems, inclusive musical settings promote participation, emotional well-being, and cognitive access.

**9. In what ways do you think music and rhythm contribute to the development of social skills and classroom dynamics among young learners?**

Teachers said that music greatly helps to build group cohesiveness and social ability. Through rhythm games and group singing activities, children learn to share, listen to one another, and synchronize their movements. These common events encourage mutual respect and assist in the development of regular social patterns in the classroom.

Music encourages community and helps to promote prosocial behavior, as (Savage, 2020) points out. Their work stresses how kids learn social conventions and grow empathy through rhythmic group activities. These dynamics not only improve personal relationships but also produce a cooperative classroom environment in which every student feels appreciated.

**10. Based on your experience, what practical advice or recommendations would you offer to educators who wish to use music and rhythm to enhance listening skills in early childhood education?**

To include music in daily tasks, educators encouraged the use of simple, repetitive rhythms that support learning objectives. They underlined the significance of closely observing students' reactions and modifying musical elements as needed.

They also emphasized how important it is to regularly include musical strategies in teaching and classroom management techniques.

According to (Garcés, 2022), effective music teaching results from striking a fine balance between cautious planning and observation. His research supports the idea that music is a useful teaching instrument rather than an afterthought. Teachers can improve students' listening comprehension while also encouraging increased participation and mental health by including rhythm into regular classroom activities.

*Table 1- Teachers' perceptions of the Daily Journals to enhance Vocabulary.*

Questions	Answers	Authors
<p>1. <b>How do you currently incorporate music and rhythm into your classroom activities with 3- to 5-year-old children? You may include examples such as singing, movement, or rhythmic games</b></p>	<p>Currently, we can incorporate the field of art, since in it we can develop activities that have to do with music using our own body or using other instruments from our environment.</p>	<p>In addition, studies such as the one by highlight that musical stimulation in children from 3 to 4 years old favors the development of motor and cognitive skills. (Garcés, 2022)</p>
<p>2. <b>Since you began integrating music and rhythm into your teaching, what specific changes have you observed in the children's listening skills and auditory attention?</b></p>	<p>Participants noticed that using music and rhythm helped children improve their focus, follow directions more easily, and remember what they heard. Repetitive songs made it easier for children to predict what would happen next, which supported their mental organization.</p>	<p>These observations support the findings of (LaGasse, 2024), who clarifies that rhythm has the potential to enhance auditory recall and cognitive coordination. Their studies indicate that engaging in rhythm-oriented tasks aids efficiency, which is particularly beneficial in early childhood education.</p>
<p>3. <b>Which types of musical activities — such as songs, rhythmic patterns, body movements, or use of instruments — have you found to be most effective in enhancing children's auditory attention and memory?</b></p>	<p>Participants noted that engaging in musical activities such as rhythmic songs featuring repeated lyrics, physical movements like clapping or stomping, and using basic instruments such as maracas and tambourines proved most beneficial for enhancing children's attention and memory.</p>	<p>(Bugos, 2020) Support these ideas, stating that combining rhythm, melody, and movement activates brain areas related to memory and sound processing. Their research shows that this multisensory approach helps children store and recall information more effectively.</p>
<p>4. <b>In your experience, how does engagement with music and rhythm influence children's ability to follow instructions and maintain concentration during lessons?</b></p>	<p>Teachers stressed how important rhythm is for organizing classroom activities and enabling pupils to remember instructions. Children start to connect noises with acts when activities involve frequent musical signals, such as chanting instructions or clapping at a given beat.</p>	<p>These observations are in line with, who explain that rhythm supp (Bonacina, 2019)orts mental structure in young learners. Their research shows that regular rhythm helps children understand classroom routines better and develop skills like following directions and managing tasks by themselves.</p>

<p><b>5. Have you noticed any impact of music and rhythm on children's language development? Could you describe these effects?</b></p>	<p>All five instructors observed a tight link between language learning and music. They found that kids advanced in sentence construction, word acquisition, and correct talking. Music also helped shy students feel more comfortable and confident when speaking. Songs with repeated words and melodies made it easier for children to remember language patterns and sounds.</p>	<p>(Hohenadl, 2021) Supports this idea by explaining that listening to music from an early age helps children recognize syllables and sounds, which is important for learning language. His study shows that musical activities are useful tools for developing strong language skills.</p>
--	--	---

*Table 2 - Teachers' perceptions of the Daily Journals to enhance Vocabulary.*

<b>Questions</b>	<b>Answers</b>	<b>Authors</b>
<p><b>6. What emotional and behavioral responses do you usually observe in children during and after music and rhythm activities?</b></p>	<p>Teachers reported that music had a positive emotional impact on the children. They became more cheerful, friendly, and eager to participate. Music sessions helped the children connect with classmates, express their feelings, and enjoy working together.</p>	<p>This supports the findings of (Barrio, 2024), who explains that music helps children manage their emotions and feel more connected to others. Their study shows that rhythm encourages cooperation and emotional balance, which makes students more open to teamwork and learning together.</p>
<p><b>7. What challenges or difficulties have you encountered when using music and rhythm as tools for teaching listening skills?</b></p>	<p>Teachers shared some difficulties when using music in the classroom. These included not having enough musical materials, limited time for planning, and problems keeping students focused when the music didn't match the lesson.</p>	<p>(Arabnia, 2024) explains that music works best when teachers adapt it to meet different students' needs. His research shows that adjusting things like speed, volume, and content in real time helps create an inclusive learning space. This flexible approach is essential for using music effectively in early education.</p>
<p><b>8. Do you tailor your musical content or activities to accommodate children's sensory preferences? How do you adapt your approach?</b></p>	<p>All the teachers agreed that they would change their musical activities to fit the children's different sensory needs and ways of learning. Some use pictures or drawings along with sounds to help children who learn better by seeing, while others let children</p>	<p>(Benavides, 2025) Support this idea, saying that music lessons should be designed to include all kinds of learners. Their findings indicate that, regardless of a child's sensory ability, modifying music to accommodate various demands makes them feel</p>

	play instruments to support those who learn by moving.	engaged, emotionally supported, and more capable of learning.
<p><b>9. Do you tailor your musical content or activities to accommodate children's sensory preferences? How do you adapt your approach?</b></p>	<p>Teachers explained that music plays a big role in helping children develop social skills and work well together. Singing in groups and rhythm games teach children to wait their turn, listen carefully, and act in sync with others.</p>	<p>(Benavides, 2025) bolster this, showing how music promotes friendly behavior and a sense of belonging. Their study shows how group rhythm activities promote empathy and social norms in a variety of ways, creating a cooperative learning atmosphere in the classroom.</p>
<p><b>10. Based on your experience, what practical advice or recommendations would you offer to educators who wish to use music and rhythm to enhance listening skills in early childhood education?</b></p>	<p>Teachers suggested including music naturally in the daily classroom routine and using simple, repeated rhythms that match the lesson's goals. They stressed the importance of watching how students respond and changing the music when needed.</p>	<p>(Almachi, 2023) agrees, explaining that successful music teaching requires careful planning and paying attention to students. His research shows that using music as a regular part of lessons, not just sometimes, helps children improve listening skills, stay interested, and feel safe.</p>

## Chapter V

### Conclusions and recommendations

This chapter presents the conclusions and recommendations based on the general and specific objectives of this research.

#### General Objective

To identify the benefits of integrating music and rhythm in a neurosensory learning environment for the development of auditory skills in children aged 3 to 5.

#### Conclusion

##### Conclusion 1:

The integration of music and rhythm in neurosensory environments significantly benefits the development of auditory skills in very young learners. According to the opinions of the five early childhood teachers interviewed, musical events improve auditory memory, attention, and instruction-following abilities. These findings are in line with the overall goal of this study, demonstrating that regular exposure to songs, body movements, and rhythmic games enhances children's capacity to process auditory information in relevant and enjoyable ways.

#### Recommendation

##### Recommendation 1:

Rhythmic approaches should be used by early childhood teachers in their everyday inclusive classroom practices. This supports not only auditory development but also engagement and classroom harmony. Teachers should be encouraged to attend workshops or short training modules focused on music-based pedagogies that target listening comprehension in early childhood.

**Specific Objective 1**

To define how rhythm-based interventions in music influence neurosensory processing of auditory information in 3- and 5-year-old children.

**Conclusion 2:**

Teachers noted the benefit of rhythmic activities (e.g., tapping, clapping, singing) for children's sound awareness and sound response. These interventions supported active listening and attentional control. This demonstrates that rhythm is cognitively stimulating to neurosensory processing and addresses the first specific aim by showing that rhythm enhances the processing and comprehension of sound.

**Recommendation 2:**

Schools should consider making sensory-friendly rhythmic activities a part of important learning times. The basic materials, such as tambourines, shakers, or body percussion activities, are easy to implement and do not require too many material resources or money investment, which is possible in practically all classrooms.

**Specific Objective 2**

To explore the relationship between musical and rhythmic activities to enhance language comprehension in 3- and 5-year-old children.

**Conclusion 3:**

The teachers' comments indicated that language development is related to music and rhythm. Repetitive songs helped word recognition and sentence construction. Such strategies also led to increased speech in children who began with little vocabulary or articulation. This

result addresses Specific Aim 2: supporting that musical engagement helps both listening and early language.

### **Recommendation 3:**

Music should be purposefully selected by teachers that complement the vocabulary and sentence structures. Including songs that include specific language targets, like naming actions, parts of the body, and routines, can also allow the child to interact verbally with the classroom material. Creating language development at home through communities of parents by sharing playlists might be possible.

### **Specific Objective 3**

To investigate the auditory advantages, such as auditory attention and auditory memory, in 3- and 5-year-old children after music interventions.

### **Conclusion 4:**

Teachers had repeatedly observed that children who attended the Felix sessions also exhibited better auditory attention and memory. When sequences or instructions were delivered with rhythms or musical cues, children were more likely to be able to remember them. This confirms the third specific aim and demonstrates that rhythm can be a successful memory aid in early learning contexts.

### **Recommendation 4:**

Teachers are encouraged to use memory games or chants with rhythm to ensure the concepts "stick". Quick audio-based exercises or call-and-response games done on a daily basis can boost students' memory and assist in internalizing classroom expectations and norms for children.

Finally, it is worth mentioning that the approach followed in this research work aimed at a different teaching of the students. The purpose was to demonstrate that some scholars work on this kind of approach, even despite the fact that not all scholars consider this a meaningful approach. The experience of practicing this form of humanist, sensorial education, however, has shown that music and rhythm complexes can be used as a strong instrument to help develop listening, to calm down some pulses, and to create a more collective classroom dynamic. This study contributes meaningful insights into how these strategies benefit early childhood education and opens paths for further qualitative exploration in the field.

- Ali, A. A. (2020). *International Journal of English Literature and Social Sciences*, 5(4). *Using English Songs to Improve Young Learners`*, 949-959.
- Almachi, T. (2023). *Communities & Collections*. Obtenido de Actividades musicales en el desarrollo del proceso cognitivo básico (memoria) de los niños de Educación Inicial.
- Anabel, P. D. (2024). *REPOSITORIO INSTITUCIONAL*. Obtenido de La música como estrategia metodológica para el desarrollo del lenguaje oral en niños y niñas de 4 a 5 años.
- Anavelle, A. P. (2024). *REPOSITORIO INSTITUCIONAL*. Obtenido de La música infantil en el desarrollo de las habilidades sociales en niños de Educación Inicial .
- Arabnia, H. R. (2024). *Applied Cognitive*. Obtenido de Applied Cognitive.
- Artur C Jaschke, H. H. (28 de febrero de 2018). *National Library of medicine*. Obtenido de Longitudinal Analysis of Music Education on Executive Functions in Primary School Children: <https://pubmed.ncbi.nlm.nih.gov/29541017/>
- Barrio, L. d. (2024). *Music and movement pedagogy in basic education: a systematic review*. Obtenido de Music and movement pedagogy in basic education: a systematic review: <https://www.frontiersin.org/journals/education/articles/10.3389/feduc.2024.1403745/full>
- Benavides, T. &. (2025). *Focus and Calm: The Role of Sensory Spaces in Helping Kids Thrive*. Obtenido de Focus and Calm: The Role of Sensory Spaces in Helping Kids Thrive: <https://learninglabfl.com/focus-and-calm-the-role-of-sensory-spaces-in-helping-kids-thrive/>
- Bonacina, S. (2019). *How Rhythmic Skills Relate and Develop in School-Age Children*. Obtenido de How Rhythmic Skills Relate and Develop in School-Age Children: <https://pmc.ncbi.nlm.nih.gov/articles/PMC6566463/>
- Bugos, J. (2020). *The effects of a short-term music program on preschool children's executive functions*. Obtenido de The effects of a short-term music program on preschool children's executive functions:

[https://www.researchgate.net/publication/313900902\\_The\\_effects\\_of\\_a\\_short-term\\_music\\_program\\_on\\_preschool\\_children's\\_executive\\_functions](https://www.researchgate.net/publication/313900902_The_effects_of_a_short-term_music_program_on_preschool_children's_executive_functions)

Burak, S. (2024). *The Effect of Musical Play on the Social Skill Development of Primary School Students*. Obtenido de The Effect of Musical Play on the Social Skill Development of Primary School Students:

[https://www.researchgate.net/publication/378478350\\_The\\_Effect\\_of\\_Musical\\_Play\\_on\\_the\\_Social\\_Skill\\_Development\\_of\\_Primary\\_School\\_Students](https://www.researchgate.net/publication/378478350_The_Effect_of_Musical_Play_on_the_Social_Skill_Development_of_Primary_School_Students)

Carrasco, A. A. (2022). *A METHODOLOGICAL STRATEGY THAT INTEGRATES ONLINE PLATFORMS*. Obtenido de Research project prior to obtaining the title of Master on English Pedagogy: <https://repositorio.puce.edu.ec/server/api/core/bitstreams/d18bd096-274d-4f41-ae1-14a6cd471f10/content>

Cecilia Avila, M. B. (2022). THE USE OF SONGS TO ENHANCE LISTENING SKILL IN CHILDREN OF. 24.

Garcés, L. ( 2022). *Repositorio Digital ULVR* . Obtenido de Estimulación musical y el desarrollo cognitivo en niños de 3 a 4 años.

Gillon, G. (2000). *The Efficacy of Phonological Awareness Intervention for Children With Spoken Language Impairment*. Obtenido de The Efficacy of Phonological Awareness Intervention for Children With Spoken Language Impairment.

Hohenadl, C. (2021). *Deep learning differentiates between healthy and diabetic mouse ears from optical coherence tomography angiography images*. Obtenido de Deep learning differentiates between healthy and diabetic mouse ears from optical coherence tomography angiography images.

Ilar, B. (2020). *Longitudinal Research on Music Education and Child Development: Contributions and Challenges*. Obtenido de Longitudinal Research on Music Education and Child Development: Contributions and Challenges: <https://journals.sagepub.com/doi/full/10.1177/2059204320937224>

Kodály, O. a. (april de 2021). *Music's Effect on Child Development*. Obtenido de Educator's Perspectives: Comparing Kodály, Orff, and Dalcroze:

- <https://musik4thesoul.wordpress.com/2012/04/10/educators-perspectives-comparing-kodaly-orff-and-dalcroze-26/>
- Kuśnierek, A. (2016). *semanticscholar*. Obtenido de The role of music and songs in teaching English vocabulary to students: <https://www.semanticscholar.org/paper/The-role-of-music-and-songs-in-teaching-English-to-Ku%C5%9Bnierek/854cd5f5daaf2800218e608c1d3ef1f20f34f2b0>
- LaGasse, B. (2024). *Rhythm and music for promoting sensorimotor organization in autism: broader implications for outcomes*. Obtenido de Rhythm and music for promoting sensorimotor organization in autism: broader implications for outcomes: <https://pmc.ncbi.nlm.nih.gov/articles/PMC11260726/>
- Laure, M. (marzo de 2023). Obtenido de Stimulating the Development of Rhythmic Abilities in Preschool Children in Montessori Kindergartens with Music-Movement Activities: A Quasi-Experimental Study.
- Liulingzi, X. (28 de febrero de 2023). *JOURNAL OF MODERN LEARNING DEVELOPMENT*. Obtenido de thajjo: <https://so06.tci-thajjo.org/index.php/jomld/article/view/259107>
- Magraner, J. S. (april de 2021). Obtenido de Effects of the Educational Use of Music on 3-to 12-Year-Old Children's Emotional Development: A Systematic Review.
- McLeod, S. (5 de agosto de 2024). *simplypsychology*. Obtenido de Piaget's Theory and stages of cognitive development: <https://www.simplypsychology.org/piaget.html>
- Patton, M. Q. (2020). *Qualitative Research & Evaluation Methods*. Obtenido de Qualitative Research & Evaluation Methods.
- Pino, M. C. (2023). *The Association between Music and Language in Children: A State-of-the-Art Review*. Obtenido de The Association between Music and Language in Children: A State-of-the-Art Review: <https://pmc.ncbi.nlm.nih.gov/articles/PMC10216937/>
- Putkinen, V. (2020). *Informal musical activities are linked to auditory discrimination and attention in 2-3-year-old children: an event-related potential study*. Obtenido de Informal musical activities are linked to auditory discrimination and attention in 2-3-year-old children: an event-related potential study: <https://pubmed.ncbi.nlm.nih.gov/23167769/>

- Robison, P. C. (2024). *REPOSITORIO INSTITUCIONAL*. Obtenido de La música como estrategia metodológica para el desarrollo del lenguaje oral en niños y niñas de 4 a 5 años.
- Rushton, R. (2022). *Music-based interventions for people with profound and multiple learning disabilities: A systematic review of the literature*. Obtenido de Music-based interventions for people with profound and multiple learning disabilities: A systematic review of the literature.
- Savage, P. E. (2020). *Music as a coevolved system for social bonding*. Obtenido de Music as a coevolved system for social bonding:  
<https://www.cambridge.org/core/journals/behavioral-and-brain-sciences/article/abs/music-as-a-coevolved-system-for-social-bonding/F1ACB3586FD3DD5965E56021F506BC4F>
- Selmani, T. A. (2024). *How music in schools boosts child development*. Obtenido de Music engages multiple areas of the brain, contributing to cognitive, emotional, and social growth.
- UTPL. (2021). UTPL impulsa educación musical inclusiva para niños . *UTPL impulsa educación musical inclusiva para niños , 1-5*.
- Vargas, C. L. (2023). COMPREHENSIBLE INPUT FOR BOOSTING LISTENING SKILLS AMONG. *COMPREHENSIBLE INPUT FOR BOOSTING LISTENING SKILLS AMONG*, 38.
- Villegas, M. F. (2024). *Estrategia didáctica basada en la música para el desarrollo del lenguaje oral en los niños de educación inicial*. Obtenido de Estrategia didáctica basada en la música para el desarrollo del lenguaje oral en los niños de educación inicial.
- Vivero Roca, G. M. (2016). *Musical activities to develop english listening skills to students of bgu at unidad educativa fiscomisional Experimental José María Vélaz. S. J. In Santa Elena, Santa Elena province*. Obtenido de Musical activities to develop english listening skills to students of bgu at unidad educativa fiscomisional Experimental José María

Vélaz, S. J. In Santa Elena, Santa Elena province:  
<https://repositorio.upse.edu.ec/handle/46000/4175>

Willis, J. (2023). *Using Music During Instruction to Support Cognition*. Obtenido de Using Music During Instruction to Support Cognition: <https://www.edutopia.org/article/using-music-support-deeper-learning/>

Zaatar, M. T. (2023). *The transformative power of music: Insights into neuroplasticity, health, and disease*. Obtenido de The transformative power of music: Insights into neuroplasticity, health, and disease.

## Annexes

### *Annex A: Certified Anti-Plagiarism System*

#### **Certificado Sistema Anti-Plagio**

En calidad de tutor/a del Trabajo de Integración Curricular denominado “MUSIC AND RYTHM IN NEUROSENSORY CLASSROOM FOR DEVELOPMENT OF LISTENING SKILLS IN VERY YOUNG LEARNERS” elaborado por las estudiantes EUGENIO VERA DAYANA LISBETH y RAMIREZ BLASCHKE KEVIN HERNAN de la Carrera de Pedagogía de los Idiomas Nacionales y Extranjeros, de la Facultad de Ciencias de la Educación e Idiomas, de la Universidad Estatal Península de Santa Elena, me permito declarar que una vez analizado en el sistema anti plagio COMPILATIO, luego de haber cumplido los requerimientos exigidos de valoración, el presente trabajo de investigación, se encuentra con 2 % de la valoración permitida, por consiguiente se procede a emitir el informe , para proceder a la revisión por parte del especialista.

Atentamente,



---

Julieta Verónica Limones Borbor



CERTIFICADO DE ANÁLISIS  
magister

## Capítulos completos

**2%**  
Textos sospechosos



**0% Similitudes**  
0% similitudes entre comillas  
0% entre las fuentes mencionadas  
**< 1% Idiomas no reconocidos**  
**2% Textos potencialmente generados por la IA**

Nombre del documento: Capítulos completos .docx  
ID del documento: 5e94e3b3dc34c807eef202500428d80b577f47  
Tamaño del documento original: 59,11 kB

Depositante: JULIETA VERÓNICA LIMONES BORBOR  
Fecha de depósito: 11/6/2025  
Tipo de carga: interface  
fecha de fin de análisis: 11/6/2025

Número de palabras: 6088  
Número de caracteres: 43.112

Ubicación de las similitudes en el documento:

**Annex B: Questionnaire**

**Population:** Five professional teachers specialized in educating children aged three to five in a neurosensory classroom setting.

**Sample:** Five early childhood education teachers with experience in teaching children aged three to five in inclusive, sensory-focused environments.

**Questions aimed at teachers**

1. How do you currently incorporate music and rhythm into your classroom activities with 3- to 5-year-old children? You may include examples such as singing, movement, or rhythmic games.

2. Since you began integrating music and rhythm into your teaching, what specific changes have you observed in the children's listening skills and auditory attention? Please describe any noticeable improvements in focus, memory, or comprehension.

3. Which types of musical activities-such as songs, rhythmic patterns, body movements, or use of instruments-have you found to be most effective in enhancing children's auditory attention and memory?

4. In your experience, how does engagement with music and rhythm influence children's ability to follow instructions and maintain concentration during lessons?

5. Have you noticed any impact of music and rhythm on children's language development? Could you describe these effects?

**6.** What emotional and behavioral responses do you usually observe in children during and after music and rhythm activities? You may comment on aspects such as enthusiasm, social interaction, engagement levels, resource challenges, or adaptations for different sensory needs.

**7.** What challenges or difficulties have you encountered when using music and rhythm as tools for teaching listening skills?

**8.** Do you tailor your musical content or activities to accommodate children's sensory preferences? How do you adapt your approach?

**9.** In what ways do you think music and rhythm contribute to the development of social skills and classroom dynamics among young learners?

**10.** Based on your experience, what practical advice or recommendations would you offer to educators who wish to use music and rhythm to enhance listening skills in early childhood education?

*Annex C: Transcripts of interview aimed at teachers*

	<b>How do you</b>	<b>Since you</b>	<b>Which types</b>
<b>RESULT OF THE ANSWER TO THE QUESTIONNAIRE</b>	<b>currently</b>	<b>began integrating</b>	<b>of musical activities-</b>
	<b>incorporate music</b>	<b>music and rhythm</b>	<b>such as songs,</b>
	<b>and rhythm into</b>	<b>into your teaching,</b>	<b>rhythmic patterns,</b>
	<b>your classroom</b>	<b>what specific</b>	<b>body movements, or</b>
	<b>activities with 3- to</b>	<b>changes have you</b>	<b>use of instruments-</b>
	<b>5-year-old</b>	<b>observed in the</b>	<b>have you found to be</b>
	<b>children? You may</b>	<b>children's listening</b>	<b>most effective in</b>
	<b>include examples</b>	<b>skills and auditory</b>	<b>enhancing children's</b>
	<b>such as singing,</b>	<b>attention? Please</b>	<b>auditory attention</b>
	<b>movement, or</b>	<b>describe any</b>	<b>and memory?</b>
	<b>rhythmic games</b>	<b>noticeable</b>	
		<b>improvements in</b>	
		<b>focus, memory, or</b>	
		<b>comprehension</b>	
<b>INTERVIEWEE 1</b>	I have	<b>When music</b>	I think singing
	personally <b>seen the</b>	<b>and rhythm are</b>	to children is one of
	<b>benefits of music in</b>	<b>integrated into the</b>	the most effective
	<b>children and</b>	<b>teaching-learning</b>	activities with the best
	<b>recommend using it</b>	<b>process, significant</b>	results for children
<b>in all daily routine</b>	<b>improvements are</b>	because <b>we manage to</b>	

	<p>activities, such as in the content taught to children to reinforce learning. This is achieved not only by listening to it but also by observing the teacher's rhythmic movements and articulating properly when singing the song.</p>	<p>observed in children, especially in concentration and memory, but even more so in language development.</p>	<p>develop the teacher-student bond and, consequently, their attention and memory.</p>
<b>INTERVIEWEE 2</b>	<p>Where there are repetitive songs in the different themes covered.</p>	<p>It's a huge change, because it means that every child demonstrates their actions.</p>	<p>Educational songs with rhythm for different activities, whether they are learning phonemes and vowels.</p>
<b>INTERVIEWEE 3</b>	<p>We can now incorporate this into the arts, as we can develop activities</p>	<p>I believe that using music greatly helps students' attention, as it serves</p>	<p>I believe that including all these musical activities allows for</p>

	related to music using our own bodies or other instruments from our environment.	as an active break, allowing students' brains to activate concentration, memory, and attention.	multisensory development, which helps stimulate students' cognitive abilities and facilitates their overall learning.
<b>INTERVIEWEE 4</b>	Music and movement for preschoolers promote cognitive development, improve physical skills, and foster social and emotional growth.	I have observed notable improvements in children's listening skills, concentration, and memory. They have demonstrated a greater ability to follow instructions.	The musical activities that have proven most effective in improving auditory attention and memory are songs with repetition, rhythmic patterns, and body movements.
<b>INTERVIEWEE 5</b>	Currently, music and rhythm are incorporated into classroom activities and early childhood stimulation sessions through various	Since music and rhythm began to be integrated into teaching children aged 3 to 5, specific and significant changes have been	Singing children's songs with repetitive rhythms and accompanying them with gestures facilitates memorization and attention, as children

---

strategies that combine singing, movement, and rhythmic games to stimulate cognitive, emotional, and motor skills. Some specific examples are:

Using instruments such as drums, tambourines, and flutes to encourage children to respond with specific movements to the sounds they hear, such as walking, stopping, or pretending to be asleep. This

observed in their listening skills and auditory attention, which directly impact their cognitive and emotional development. For example, children show a greater ability to maintain attention for longer periods of time in activities that require listening and responding to sound stimuli, such as rhythmic games or songs with instructions. This translates into a greater willingness to follow verbal

associate sounds with actions, reinforcing auditory memory and concentration.

Creating short rhythmic sequences with clapping or simple percussion instruments (drums, rattles, bells) helps children develop rhythmic perception, auditory discrimination, and working memory.

Allowing children to manipulate instruments such as small drums, bells, or cymbals to experiment with different sounds and rhythms promotes sustained attention

---

---

activity, based on instructions in other and auditory  
 Edgar Willems' areas of the discrimination.  
 methodology called classroom.  
 “auditory zoom,”  
 stimulates attention,  
 auditory  
 discrimination, and  
 self-regulation.

---

**Annexes D:** *Transcripts of interview aimed at teachers*

---

	<b>In your</b>	<b>Have you</b>	<b>What</b>
<b>RESULT OF THE ANSWER TO THE QUESTIONNAIRE</b>	<b>experience, how</b>	<b>noticed any impact</b>	<b>emotional and</b>
	<b>does engagement</b>	<b>of music and</b>	<b>behavioral responses</b>
	<b>with music and</b>	<b>rhythm on</b>	<b>do you usually</b>
	<b>rhythm influence</b>	<b>children’s</b>	<b>observe in children</b>
	<b>children’s ability to</b>	<b>language</b>	<b>during and after</b>
	<b>follow instructions</b>	<b>development?</b>	<b>music and rhythm</b>
	<b>and maintain</b>	<b>Could you</b>	<b>activities? You may</b>
	<b>concentration</b>	<b>describe these</b>	<b>comment on aspects</b>
	<b>during lessons?</b>	<b>effects?</b>	<b>such as enthusiasm, social interaction, engagement levels,</b>

---

---

**resource challenges, or adaptations for different sensory needs.**

---

	It is very	As I	Dancing and
<p><b>INTERVIEWEE 1</b></p>	<p>effective because when students listen attentively to a well-chosen song with content related to what they are <b>learning, it captures their attention and they enjoy it much more, achieving truly meaningful learning.</b></p>	<p>mentioned in one of the previous questions, one of the most important benefits observed is the development of children's language skills. At the beginning of the school year, children who had not been to school before, after just a few weeks of being included in a <b>classroom exposed to songs and</b></p>	<p>singing have many benefits for humans, and this has been scientifically proven. That is why songs are often used to set the mood in different educational spaces, so that <b>children can improve their mood, calm down, exercise self-control, and share with their classmates.</b></p>

---

		dancing, show how they have evolved in their language and communication with others.	
<b>INTERVIEWEE 2</b>	They are more connected and feel confident in what they do.	If there has been development, it is because children demonstrate their personality.	They are capable of challenging different activities.
<b>INTERVIEWEE 3</b>	Enabling the activation of different parts of the brain to contribute to the development of skills and long-term learning.	I believe that exposing young children to music helps them learn new words and improve their pronunciation and vocalization.	Music helps them explore their own emotions and gain an understanding of what they want to express and how they want to express it.
<b>INTERVIEWEE 4</b>	Music prepares the brain for learning and helps children learn	Repetition and melody help with memorization and pronunciation.	Improving emotional skills leads to greater concentration and a

	to read and speak while developing memory and attention.	This has been shown to be a crucial stage for their growth.	positive attitude toward learning.
	Educational songs with clear and repetitive instructions, such as “Listen and Repeat,” help children pay attention and respond appropriately to instructions, improving their ability to follow orders in the classroom.	Listening to and singing songs with familiar melodies and repetitive lyrics helps children memorize sequences of words and phrases, which strengthens the auditory memory essential for language.	Children show a high level of enthusiasm and joy, displaying facial expressions of happiness and energy during musical activities. Music acts as a natural channel for emotional expression, which helps children engage with interest and enjoy the learning process.
<b>INTERVIEWEE 5</b>	Music with rhythm and intonation encourages children to anticipate	in musical games and singing helps expand vocabulary, improve pronunciation, and	Music also facilitates the expression and management of emotions such as

---

movements or actions, which increases their cognitive ability and auditory attention. By participating in rhythmic activities, children develop the ability to focus on specific stimuli, which translates into greater concentration during tasks.	strengthen auditory memory, all of which are fundamental aspects of oral language development.	anxiety, sadness, or frustration. Structured musical activities allow children to recognize and express their feelings, promoting self-control and emotional self-regulation.
---	--	---

---

*Annexes E: Transcripts of interview aimed at teachers*

---

	<b>What</b>	<b>Do you tailor</b>	<b>In what ways</b>
<b>RESULT OF THE ANSWER TO THE QUESTIONNAIRE</b>	<b>challenges or difficulties have you encountered when using music and rhythm as tools for</b>	<b>your musical content or activities to accommodate children’s sensory preferences? How</b>	<b>do you think music and rhythm contribute to the development of social skills and classroom dynamics</b>

---

	<b>teaching listening skills?</b>	<b>do you adapt your approach?</b>	<b>among young learners?</b>
<b>INTERVIEWEE 1</b>	Children spend a lot of time looking at screens, and when songs are played from a speaker or cell phone, they look for videos to watch. <b>They need to be told that they should pay attention and listen carefully to understand the song that is being played.</b>	Yes, <b>I always try to adapt my musical content and activities to the sensory preferences</b> of the children. Every child perceives and responds to the world differently, so I observe carefully how they react to certain sounds, rhythms, or instruments.	I firmly believe that <b>music and rhythm are powerful tools for fostering social skills and positive dynamics in the classroom.</b> Through musical activities, children not only express themselves freely, but also learn to listen to others, wait their turn, coordinate, and work as a team.
<b>INTERVIEWEE 2</b>	The <b>challenge is for each child to show interest in what was done.</b>	Of course, <b>children tend to be very sensitive about their moods.</b>	They are more <b>communicative and expressive.</b>

<b>INTERVIEWEE 3</b>	Have access to resources and adapt them to the different learning styles of students.	Currently, music can be adapted to a visual learner to make different strokes or drawings according to the sounds, while a kinesthetic learner is assigned to create music with a certain sound or rhythm.	We greatly facilitate communication, collaboration, and teamwork.
<b>INTERVIEWEE 4</b>	Music and rhythm can be excellent tools for teaching listening skills. One of the main challenges is that music can distract children, especially if it is not related to the content being taught.	It consists of structuring, clarifying, and presenting the text to provide children with engaging, useful, and simple learning.	These are very valuable tools for developing social and dynamic skills in children.
<b>INTERVIEWEE 5</b>	Not all children react the same way to musical stimuli; some	I adjust the volume of the music and the intensity of the	Music acts as a natural means of expression and

---

may need more time	rhythmic patterns to	communication,
to adapt or show less	avoid <b>overstimulation</b>	enabling students to
interest, making it	<b>in sensitive children</b>	share emotions, ideas,
difficult to maintain	<b>or those with sensory</b>	and experiences. By
their attention during	<b>processing</b>	<b>participating in group</b>
activities.	<b>difficulties, creating a</b>	<b>musical activities,</b>
	comfortable and safe	<b>such as choirs or</b>
	auditory	<b>bands, young people</b>
	environment.	develop skills to
		collaborate, listen,
		and respect others,
		strengthening their
		social interaction.

---