Musicogram Use by Preschool Teachers in Listening Activities

Didem Türkoğlu  
Alanya Alaaddin Keykubat University, Turkey  
https://orcid.org/0000-0003-2866-598X

Münevver Can Yaşar  
Alanya Alaaddin Keykubat University, Turkey  
https://orcid.org/0000-0003-1987-8393

Abstract
Limited and mostly superficial exposure to music experiences during childhood negatively affects various musical competencies that develop early on, such as auditory and perceptual skills, a sense of rhythm, and the ability to sing in harmony. High-quality music education in early childhood can only be achieved by incorporating meaningful and active music listening activities into teaching practices by teachers, creating learning environments aimed at enhancing musical skills in children. The learning needs, motivations, and preferences of teachers shape the musical practices in music education. The selection of techniques for implementation, preparation, or equipment deficiencies leads to a series of interrelated outcomes affecting teachers and children. With this aim, the research was conducted to gather the opinions of preschool teachers regarding the use of musicograms in their music activities and to identify the shortcomings in the appropriate use of musicograms for their intended purpose. The research employed a qualitative research method with a case study design. The study group consisted of 33 teachers working in preschools. Data was collected using the focus group technique, and the data collected were analyzed using content analysis. As a result of the research, it was determined that teachers mainly included song activities (singing and listening), rhythm activities, and, to a lesser extent, musical games (rond), and creative movement and dance activities within the framework of music activities. It has been found that most teachers do not know what “musicogram” means. Musicogram was defined as “musicomoviegram,” essentially a musical animation. Additionally, it was determined that teachers need in-service and post-service support, prefer music activities to be conducted by specialized music teachers, emphasize the use of music more as a conceptual tool than for its artistic content, face material and equipment shortages, and particularly lack theoretical and practical background in using musicograms in listening activities. Teachers were found not to include different types of music that reveal changes in musical features such as dynamics, meter, and tempo in their classrooms, and they did not express a need to include such music types.

Keywords: Musicogram, Musicograma, Early Childhood, Preschool Teacher, Music Education.

Introduction
By its very nature, music is important as a field of knowledge and an art form. It has the potential to not only nurture children’s creativity and self-expression but also to support their holistic and balanced development (Campbell & Scott-Kassner, 2019). Since music is an integral part of the cultural heritage of societies, music education is essential for the sustainability of contemporary societies. Moreover, engaging with music enhances sensory, cognitive, emotional, and motor skills, which are the driving forces behind all forms of learning (Bautista et al., 2022).

Making music has profound social and individual benefits, and music education is particularly associated with improving children’s cognitive and auditory performance. Among the various music education activities, listening to music is the most common and essential for all other musical endeavors.
However, in practice, music listening is often overlooked as a passive and pre-determined activity. Nevertheless, it is a thoughtful, creative, and purposeful activity (Johnson, 2013; Rauscher & Hinton, 2011). This purposeful activity, referred to as active music listening, is a way of engaging with music through active interactions (Goto, 2007). During active music listening, cognitive predictions about what will happen in musical processing are generated. This active aspect leads to a more comprehensive understanding of music processing involving brain structures related to action, emotion, and learning. During active listening, music processing in the brain is distinct from passive listening paradigms traditionally defined as listening to music (Vuust et al., 2022). Active music listening, a creative activity that allows the listener to create a unique personal music experience, sharpens early sound coding in the brain, leading to enhanced performance in various listening skills. It improves the ability to distinguish between rapidly changing sounds and increases selectivity in auditory perception. This, in turn, impacts the cortical processing of linguistic pitch patterns (Hallam, 2016). All music is composed of fundamental building blocks like melody, rhythm, and harmony. These building blocks are processed by different brain regions and shaped by our experiences (Blasi & Foley, 2006). Evidence suggests that active music listening produces structural changes in the brain related to the processing of sound and that these changes can occur shortly after (Koelsch et al., 2005; Raglio et al., 2015; Vuust et al., 2022). In this context, the quality of auditory encoding is closely related to the quantity and quality of music education and the nature of instrumental requirements (Rauscher & Hinton, 2011).

In addition to potential non-musical benefits that can be transferred to developmental trajectories and other domains, music is, on its own, a fundamental learning area (Rauscher & Hinton, 2011). Music listening plays a fundamental role in children’s music education. To actively engage with music, well-developed listening skills are required. Music activities included in early childhood education programs are also based on listening skills (MEB, 2013). Apart from school songs, children may encounter specific challenges when listening to different music genres (especially the “classical” repertoire of Western tradition) or participating in rhythm activities, creative movement and dance, musical stories, and similar activities. This is because children are often unfamiliar with different music genres and may have difficulty focusing their attention on the complexity of the music. ‘Musicogram,’ an approach recommended by Wuytack in the early 1970s, is a method used to teach classical music listening to children and young people who have not received formal music education (Boal-Palheiros & Wuytack, 2006; Wuytack & Boal Palheiros, 1995). This approach requires listener participation and utilizes visual perception to enhance musical perception. Listeners without formal music education may not be able to read a musical score, but they can understand a more general visual representation of music materials and musical form. Wuytack’s approach is based on three fundamental principles for active listening: a) the listener’s active participation on both a physical and mental level before engaging in the music listening activity through the performance of music materials; b) the listener’s focus on the music and recognition of music materials during the music listening activity; c) the listener’s analysis of musical form through the symbolic visual representation of the music’s integrity (Wuytack & Boal-Palheiros, 2009).

Children’s limited and mostly superficial exposure to music experiences negatively affects many early-developing musical competencies such as auditory and perceptual skills, a sense of rhythm, the ability to sing in tune, cognitive functions, and regulatory skills (Williams, 2018). Most approaches to teaching music listening emphasize a conceptual approach where children learn to describe various musical sound features. However, unfortunately, this kind of purposeful listening is not adequately implemented, both in classroom and non-classroom settings (Kratus, 2017). Quality music education in early childhood can only be achieved by incorporating meaningful and active music-listening activities into teaching practices and creating learning environments that foster the development of musical skills in children (Johnson, 2013). In this context, Musicogram, which can be

---

However, in practice, music listening is often overlooked as a passive and pre-determined activity. Nevertheless, it is a thoughtful, creative, and purposeful activity (Johnson, 2013; Rauscher & Hinton, 2011). This purposeful activity, referred to as active music listening, is a way of engaging with music through active interactions (Goto, 2007). During active music listening, cognitive predictions about what will happen in musical processing are generated. This active aspect leads to a more comprehensive understanding of music processing involving brain structures related to action, emotion, and learning. During active listening, music processing in the brain is distinct from passive listening paradigms traditionally defined as listening to music (Vuust et al., 2022). Active music listening, a creative activity that allows the listener to create a unique personal music experience, sharpens early sound coding in the brain, leading to enhanced performance in various listening skills. It improves the ability to distinguish between rapidly changing sounds and increases selectivity in auditory perception. This, in turn, impacts the cortical processing of linguistic pitch patterns (Hallam, 2016). All music is composed of fundamental building blocks like melody, rhythm, and harmony. These building blocks are processed by different brain regions and shaped by our experiences (Blasi & Foley, 2006). Evidence suggests that active music listening produces structural changes in the brain related to the processing of sound and that these changes can occur shortly after (Koelsch et al., 2005; Raglio et al., 2015; Vuust et al., 2022). In this context, the quality of auditory encoding is closely related to the quantity and quality of music education and the nature of instrumental requirements (Rauscher & Hinton, 2011).

In addition to potential non-musical benefits that can be transferred to developmental trajectories and other domains, music is, on its own, a fundamental learning area (Rauscher & Hinton, 2011). Music listening plays a fundamental role in children’s music education. To actively engage with music, well-developed listening skills are required. Music activities included in early childhood education programs are also based on listening skills (MEB, 2013). Apart from school songs, children may encounter specific challenges when listening to different music genres (especially the “classical” repertoire of Western tradition) or participating in rhythm activities, creative movement and dance, musical stories, and similar activities. This is because children are often unfamiliar with different music genres and may have difficulty focusing their attention on the complexity of the music. ‘Musicogram,’ an approach recommended by Wuytack in the early 1970s, is a method used to teach classical music listening to children and young people who have not received formal music education (Boal-Palheiros & Wuytack, 2006; Wuytack & Boal Palheiros, 1995). This approach requires listener participation and utilizes visual perception to enhance musical perception. Listeners without formal music education may not be able to read a musical score, but they can understand a more general visual representation of music materials and musical form. Wuytack’s approach is based on three fundamental principles for active listening: a) the listener’s active participation on both a physical and mental level before engaging in the music listening activity through the performance of music materials; b) the listener’s focus on the music and recognition of music materials during the music listening activity; c) the listener’s analysis of musical form through the symbolic visual representation of the music’s integrity (Wuytack & Boal-Palheiros, 2009).

Children’s limited and mostly superficial exposure to music experiences negatively affects many early-developing musical competencies such as auditory and perceptual skills, a sense of rhythm, the ability to sing in tune, cognitive functions, and regulatory skills (Williams, 2018). Most approaches to teaching music listening emphasize a conceptual approach where children learn to describe various musical sound features. However, unfortunately, this kind of purposeful listening is not adequately implemented, both in classroom and non-classroom settings (Kratus, 2017). Quality music education in early childhood can only be achieved by incorporating meaningful and active music-listening activities into teaching practices and creating learning environments that foster the development of musical skills in children (Johnson, 2013). In this context, Musicogram, which can be
used as one of these techniques, is an important method that supports children’s active music participation through music listening. Recently, it has been noticed that there has been a significant increase in the sharing of Musicogram applications on the social media accounts of preschool teachers, and Musicogram activities are frequently shared on video-sharing platforms (Sen, 2022; Türkoğlu et al., 2023). For Musicograms to be used effectively, teachers need to have knowledge and skills in music education and the use of Musicograms. Teachers’ learning needs, motivations, and preferences regarding music education also shape their musical practices. The choice of technical implementation, preparation, or equipment shortage leads to a series of interrelated outcomes affecting teachers and children. In this context, research has been conducted to reveal the opinions of preschool teachers about using “Musicogram” in listening activities. This research is important in terms of shedding light on teachers’ applications of Musicogram and how these applications can be improved in quality.

Method
This research has been conducted to reveal preschool teachers’ opinions about using “Musicogram” in listening activities. Preschool teachers’ views were evaluated to pioneer the use of Musicogram in preschool music education. In this context, a qualitative research method, the case study design, was used in the research (Yıldırım & Şimşek, 2018).

Study Sample
The research was conducted with 34 preschool teachers who work in independent kindergartens and preschool classes affiliated with the Alanya District Directorate of National Education in Antalya province. These teachers volunteered to participate in the study and had similar characteristics (such as educational background and years of experience). Permission for focus group meetings was obtained from the Alanya District Directorate of National Education, and 34 teachers volunteered for the study. However, one teacher left during the interviews, so the interviews were completed with the participation of 33 teachers. Prior to the interviews, verbal consent was obtained from the teachers regarding their participation in the research.

Data Collection
In the research, data collection was conducted using the Focus Group technique. The Focus Group technique involves bringing together a group of individuals with similar socio-demographic characteristics who can comfortably discuss the topic with a moderator, even though it may not represent a specific population. It aims to gather data by creating a multi-voiced environment where approximately 4-12 participants interact with a moderator and feel free to express their real thoughts (Rabiee, 2004). Among the qualitative research designs, there are several advantages to using focus group studies. This technique is cost-effective, offers flexibility in terms of the duration and structure of the interview depending on the interaction, and allows for chance discoveries as it does not progress within specific patterns. It also provides an opportunity for the expert conducting the interview to engage in ethnographic observation by spending time with the interviewed group, helping to better understand the target group’s characteristics (Gülcan, 2021).

The collection of research data was carried out in four stages:

First Stage - Preparation of Interview Questions
The questions prepared for use in the focus group interviews with teachers were structured from general to specific, including the nature of the music activities implemented by preschool teachers, their self-efficacy beliefs, their listening practices, the use of musicograms, and their expectations and suggestions. The questions prepared by the researchers were presented to two experts from the department of preschool education and one expert from the department of music education. Based on the experts’ opinions, the questions were revised, and it was decided to include one warm-up question and four fundamental questions in the protocol to be used in the group interview. The following questions were used in the interview:

Warm-up Question
Could you briefly introduce yourself, including your education, professional experiences, and your
experiences with music activities? Within this scope, how do you evaluate your competence level regarding music activities/listening studies?

Fundamental Questions
- What kind of activities do you frequently include in your music activities?
- What kinds of practices do you implement for listening activities?
- What are your experiences and general observations regarding the meaning and application of musicograms?
- What are your expectations and suggestions for listening activities within music activities?

Second Stage - The Planning of Focus Subgroups
In collecting research data, small subgroups were created with the voluntary 34 teachers who formed the study group. In forming these subgroups, homogenous groups were created based on the teachers’ availability. Four subgroups with 8 and 9 members were formed throughout the process, resulting in four separate sessions (8, 8, 9, 9 participants).

Third Stage - The Planning of Focus Group Interview Sessions
During the interviews, one of the researchers was designated as the moderator, and the other as the rapporteur. To ensure that the interviews were not interrupted, a warning sign was posted outside the interview room, and a seating arrangement in a U-shape was arranged so that participants could comfortably see each other and the moderator.

Fourth Stage - The Conducting of Focus Group Interviews
The focus group interviews were conducted with a moderator and a rapporteur, in four separate sessions with each group, lasting between 50 to 70 minutes. Participants filled out a personal information form at the beginning of the interview without specifying their names but using code names (T1-T33), and the moderator and rapporteur introduced themselves. The moderator provided information to the participants about the purpose of the research, the process, and confidentiality. The interviews were recorded with the participants’ verbal consent, and written notes were also taken to facilitate the transcription process. The interviews started with an ice-breaking question to make participants feel more comfortable, followed by the main questions. All participants had the opportunity to speak during the interviews, and at the end, they were asked if they wanted to add anything related to the research topic before concluding the interview.

Data Analysis
The data analysis involves a series of steps to achieve the initial purpose of a study, such as examining, categorizing, tabulating, or otherwise recombining evidence (Rabiee, 2004). In the focus group interviews, the recorded conversation content was transcribed into written form and integrated with contemporaneous written notes taken by the rapporteur. The transcribed data was subjected to content analysis. The data was analyzed using the Maxqda qualitative data analysis software. The data was read several times and coded in two stages to gain a general perspective. The data was subjected to structural coding in the first stage to break it down into meaningful sections. An attempt was made to identify the conceptual meaning of each section. Then, in the second stage, coding was performed. In this stage, categories were created through the codes established in the first stage. These categories were then brought together and thematized. Subsequently, the relationships between the codes under the identified themes were explained, and a deep exploration of cause-and-effect relationships was attempted, with direct quotations provided. In accordance with ethical guidelines, expressions indicating the identities of the participants were replaced with code names such as T1, T2, T3... for preschool teachers. A word cloud (see Figure 1) was generated using Maxqda to visualize the most common words within the preschool teacher opinion.

In order to ensure the reliability of content analysis of the research data, inter-coders were consulted to assess inter-coder agreement. In coding qualitative data, another coder was consulted, and agreement percentages were calculated. The inter-coder agreement percentage was calculated using the formula of Miles and Huberman (Miles &
The overall agreement percentage was determined to be 84%, with inter-coder agreement percentages of 93% between Coder I and Coder II, 86% between Coder I and Coder III, and 93% between Coder II and Coder III.

When examining the participants’ demographic information, all preschool teachers are preschool education graduates. Four of the thirty-three teachers are male, and the others are female. The years of service of preschool teachers vary between 6-18 years (e.g., T1=16 years, T2, T3=6 years, T4, T9, T20=14 years, etc.). When examining the educational status of the teachers, it was found that 72.7% have a bachelor’s degree (n=24) and 27.3% have a master’s degree (n=9).

Findings
The research findings have been grouped under four main themes: “music activity applications,” “listening studies,” “knowledge of musicograms,” and “expectations and suggestions for listening studies.” These main themes are presented in Figure 1.

The direct quotations containing the teachers’ opinions are included in the relevant sections. The information gathered under these themes and the quotations are provided below:

**Theme 1: Teachers’ Music Activity Practices**
The question “Which activities do you frequently include in music activities?” was posed to the teachers, and their responses were categorized into seven categories in the table below. Direct quotations from teachers regarding the activities they include in music activities are also provided under the table.

**Table 1 Teachers’ Views on the Activities Included in Music Activities**

<table>
<thead>
<tr>
<th>Music Activities</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Song activities (singing and listening)</td>
<td>T1, T2, T3, T4, T5, T6, T7, T8, T9, T10, T11, T12, T13, T14, T15, T16, T17, T18, T19, T20, T21, T22, T23, T24, T25, T26, T27, T28, T29, T30, T31, T32, T33</td>
</tr>
<tr>
<td>Rhythm exercises</td>
<td>T1, T2, T3, T4, T5, T6, T7, T8, T9, T10, T11, T12, T13, T14, T15, T16, T17, T18, T19, T20, T21, T22, T23, T24, T25, T26, T27, T28, T29, T30, T31, T32, T33</td>
</tr>
<tr>
<td>Listening (sound listening, distinguishing, and production) exercises</td>
<td>T4, T9, T10, T23, T27, T28, T29, T30, T33</td>
</tr>
<tr>
<td>Breathing exercises</td>
<td>T1, T2, T3, T8, T10, T18, T24, T25, T32</td>
</tr>
<tr>
<td>Creative movement and dance exercises</td>
<td>T1, T2, T3, T5, T7, T9, T10, T12, T17, T19, T22, T23, T24, T27, T28, T29, T32, T33</td>
</tr>
<tr>
<td>Music-based storytelling exercises</td>
<td>T1, T9, T11, T12, T13, T23</td>
</tr>
<tr>
<td>Musical game (ront)</td>
<td>T1, T2, T4, T6, T7, T8, T9, T11, T12, T15, T16, T18, T20, T21, T23, T24, T26, T27, T29, T31, T33</td>
</tr>
<tr>
<td>Choir exercises</td>
<td>T3, T4, T6, T7, T8, T27, T28, T32, T33</td>
</tr>
</tbody>
</table>
When Table 1 is examined, it is determined that teachers predominantly incorporate activities such as song studies (singing and listening), rhythm studies, musical games (ront), and creative movement and dance exercises within the framework of music activities.

Direct quotations from the teachers’ opinions are provided below:

- “We mostly sing songs and dance in music activities. Families really enjoy the shows we put on with music. We also do rhythm exercises.” (T1)
- “I really liked the rhythm exercises with cups that I found on the internet. The school gave us cups with notes, but they weren’t enough, so I asked families for plastic cups. We work with them.” (T2)
- “After attending the Orff course, I started to like rhythm exercises more. Children love working with rhythm sticks and maracas. We also use maracas in choir practices. When you think of children, you think of children’s songs; children like to repeat familiar songs.” (T3)
- “I taught the Kelebek (Butterfly) Ront, which I learned in elementary school, to the children. It turned out really nice with the Butterfly song. We sing songs and keep rhythm with our hands and feet.” (T6)
- “We give concerts to families twice a year with choir practices, on April 23rd and Mother’s Day. Families listen to us. I think songs and rhythm exercises are the children’s favorites.” (T7)
- “There are always the same children’s songs on the internet, and since I do not know how to play a musical instrument, I cannot learn new songs from sheet music. We share songs with friends. I also like rhythm exercises. I give commands with applause or rhythm sticks, and the children repeat. We do not have a music room, but we have a corner.” (T14)
- “Children’s songs are very limited and the same, but we sing them. I think rhythm exercises offer more variety. We conduct rhythm exercises with our Orff instruments like the steel triangle, castanets, bells, tambourine, maracas, timpani, xylophone, metallophone, and rhythm sticks. Our department is good at this; we collaborate on our work.” (T20)

- “They had us play the flute in our music class at university, but I have forgotten it all. I wish I had not forgotten; I would have used it when singing. Children really enjoy dancing, so I include dance exercises. We can also do rhythm exercises with applause while dancing.” (T32)
- “I try to include music activities every year. Since I graduated in 2014, I learned about music activities during my undergraduate studies. We had E.M. class. I always make sure to do breathing exercises before singing. I also attended an Orff course. We have six xylophones in our classroom. I conduct small group activities. I gradually became proficient in Orff applications. The choir work we did last year received great attention.” (T33)

**Theme 2: Teachers’ Practices in Listening Activities**

Teachers were asked the questions, “What kind of practices do you implement in listening activities?” and “How do you assess your competence in listening activities?” Their responses were categorized into five categories in Table 2, and in Table 3, they were evaluated as “sufficient” and “need improvement.” Direct quotations from teachers regarding their listening activities are also provided below the table.

### Table 2 Teachers’ Views on Listening Activities in Music Activities

<table>
<thead>
<tr>
<th>Music Activities</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listening to and distinguishing sounds</td>
<td>T1, T4, T5, T7, T8, T13, T21, T25, T30</td>
</tr>
<tr>
<td>Listening to songs and singing</td>
<td>T1, T2, T3, T4, T5, T6, T9, T10, T11, T12, T14, T15, T16, T17, T18, T19, T20, T21, T22, T23, T24, T25, T26, T27, T29, T30, T31, T32</td>
</tr>
<tr>
<td>Listening to music</td>
<td>T1, T2, T3, T4, T5, T6, T8, T10, T11, T12, T13, T15, T24, T25, T26, T28, T30, T32, T33</td>
</tr>
<tr>
<td>Sound production</td>
<td>T9, T14, T19, T20, T21, T22, T23</td>
</tr>
<tr>
<td>Musicogram</td>
<td>T1, T17, T24, T25, T27</td>
</tr>
</tbody>
</table>
“When Table 2 is examined, it draws attention that teachers mostly conduct listening activities in music activities, particularly listening to and singing songs (n=28) and listening to music (n=19). In addition to these, it can be observed that teachers also include listening activities such as listening to and distinguishing sounds (n=9), sound production (n=7), and musicogram (n=5).

Direct quotations from teachers regarding their views are provided below:

- “To improve listening, we listen to different sounds, for example, car sounds, and try to figure out what they are. It is fun for the children; they like to pretend to drive like we are driving a car. We also do this with animal sounds; I choose them from the internet. However, I think we mostly sing and listen.” (T7)
- “I used YouTube musicogram videos; we watch and try to follow along. I do not have any training; I had heard about the musicogram workshop.” (T15)
- “With animal sounds, we create an animal choir; it seems like sound production to me. Yes, everyone makes different sounds.” (T19)
- “At school, they showed us a game where they make sounds from musical instruments, and we had to guess which sound came from which instrument. I put different materials in a bag, like stones, blocks, spoons, etc. I let the children each choose two items. We divide into two groups, and with our backs turned to each other, we try to guess what sound the other group made.” (T21)
- “One child makes a sound, and we try to imitate it by making the same sound. Sometimes, I play music from different countries. When I search online, the country’s name comes up.” (T22)
- “I play musicograms, but they cannot always do it with their hands. Let me show you one that we have memorized...” (T24)
- “We first worked with cups for musicograms, and then I had them do some exercises using their hands. A teacher friend of mine attended a body rhythm workshop, and she taught us how to make musicograms with shopping bags.” (T25)
- “I have not heard of musicograms, but I do not know if it is done with musical tubes. I will look it up on the internet after the meeting. We sing songs and listen. Whose voice is this? Who is speaking? We play games for listening, but we do this in Turkish lessons.” (T27)

Table 3 Teachers’ Views on their Competence in Listening Activities

<table>
<thead>
<tr>
<th>Music Activities</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am competent</td>
<td>T1, T2, T5, T7, T8, T10, T11, T12, T13, T15, T16, T17, T18, T23, T24, T26, T28, T29, T30, T32,</td>
</tr>
<tr>
<td>I need to improve.</td>
<td>T3, T4, T6, T9, T14, T19, T20, T21, T22, T25, T27, T31, T33</td>
</tr>
</tbody>
</table>

It is seen in Table 3 that the teachers generally feel themselves competent in terms of listening activities, but there are also teachers who express the need to improve themselves in listening activities (n=13).

Below are direct quotes from the teachers’ opinions:

- “A parent who plays the guitar participated in the class, and the children had a lot of fun that day. I wish I could play a musical instrument. I would like support in this regard.” (T9)
- “At university, we were trained well. Our professor had us make and implement music materials. He prepared a repertoire for children’s songs, and I did not have any difficulties.” (T11)
- “Music activities are not as difficult as mathematics; they are easier for me. I do not have any problems. I think I am competent.” (T13)
- “I have never done a music-themed story; I do not know what that is. I also have not attended the Orff course; courses are expensive for me. I would attend if the Ministry of Education organizes a course for this.” (T19)
- “I have attended many courses, but I have never attended a music activity course. It would be good if I did; I heard from friends that musical dramatization is done. I have not done it, I do not know.” (T25)
- “There should definitely be in-service training on activities; we can be more beneficial to the children. I cannot even do choir work; I cannot do shows like my colleagues.” (T31)
Theme 3: Teachers’ Experiences and Observations Regarding the Meaning and Implementation of “Musicogram”

Teachers were asked the question: “What are your experiences and general observations regarding the meaning and implementation of ‘Musicogram’?” Their answers are summarized in the table below. Direct quotes from the teachers’ experiences and observations regarding Musicogram and its implementation are also provided under their respective categories.

Table 4 Teachers’ Opinions on the Meaning of “Musicogram”

<table>
<thead>
<tr>
<th>Musicogram</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>I do not know.</td>
<td>T2, T5, T8, T10, T11, T12, T16, T23, T26</td>
</tr>
<tr>
<td>Music term</td>
<td>T4, T14, T19, T30</td>
</tr>
<tr>
<td>A type of rhythm exercise</td>
<td>T6, T9, T21, T22, T33</td>
</tr>
<tr>
<td>Exercises with cups</td>
<td>T7, T13, T29, T32</td>
</tr>
<tr>
<td>Following music by hand or finger</td>
<td>T1, T17, T24, T25, T27</td>
</tr>
<tr>
<td>Following songs by hand or finger</td>
<td>T18</td>
</tr>
<tr>
<td>Accompanying music</td>
<td>T3, T28</td>
</tr>
<tr>
<td>Accompanying songs with rhythm instruments</td>
<td>T20, T31</td>
</tr>
<tr>
<td>Musical animation</td>
<td>T15</td>
</tr>
</tbody>
</table>

When Table 4 is examined, it can be seen that the majority of teachers do not know what a “musicogram” is. Ten teachers stated that they do not know, four teachers mentioned that it is a music term, five teachers indicated that it is a type of rhythm exercise, four teachers believed it is related to exercises with cups, two teachers thought it means accompanying songs with rhythm instruments, and two teachers mentioned it relates to accompanying music. Five teachers correctly described “musicogram” as following music by hand or finger, and one teacher referred to it as “musical animation” by mentioning the Musicomoviemogram application.

Direct quotes from teachers regarding their opinions are provided below:
• “I have no heard of this term before; I do not know.” (T2)
• “I know it has something to do with exercises using plastic cups. At first, the children had difficulty, could not do it. We make the movements easier now.” (T13)
• “I know it is related to exercises with cups. We accompany children’s songs with cups. Initially, the sounds do not come out well, but they start hitting the cups in coordination later. I think it is a fun activity.” (T29)
• “We attended the Body to Play Workshop (Instructor: T.E.T.) last year. It was a lot of fun. We learned what can be done with plastic cups, notated pipes, and plastic shopping bags. It was a complete musicogram application for us.” (T32)
• “I think it is a musical term, and to understand some music terms, you need to receive music education. Actually, it would be better if a musician came; it is for the children’s benefit.” (T19)
• “Finger-following music, especially classical music, i.e., going over the shapes following the music. These shapes are created to fit the music. I watched videos that teach this.” (T17)
• “There are some pictures that describe songs, like clapping, snapping fingers, stepping, etc. We perform these movements at the appropriate places while singing songs. We project it on the smartboard and follow these movements from there.” (T18)
• “Some songs are accompanied by rhythm sticks or maracas. It is like rhythm exercises, but we do it by watching videos. There are examples with children’s groups in a ring format.” (T15)
• “We watch music animations with the children; Tom and Jerry with music. Children find it funny and like it.” (T15)

Sharing of experiences on the implementation of musicograms was conducted with teachers who had experience with the application, and the results are provided below in Table 5.

Table 5 Teachers’ Opinions on the Implementation of “Musicograms”

<table>
<thead>
<tr>
<th>Categories</th>
<th>Subcategories</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selecting</td>
<td>From the internet</td>
<td>T1, T15, T17, T18, T24, T25, T27</td>
</tr>
</tbody>
</table>
Planning

<table>
<thead>
<tr>
<th></th>
<th>Planning</th>
<th>Implementing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening a video recording from the computer (YouTube)</td>
<td>T15</td>
<td>Watching T1</td>
</tr>
<tr>
<td>Opening a video recording from the smartboard (YouTube)</td>
<td>T18</td>
<td>Accompanying T27</td>
</tr>
<tr>
<td>Preparing worksheets</td>
<td>T24</td>
<td></td>
</tr>
</tbody>
</table>

When Table 4 is examined, the teachers’ experiences related to the musicogram application are evaluated in the categories of “selection,” “planning,” and “implementation.” According to this, these teachers make use of the internet for musicogram applications. For musicogram planning, it is stated that a computer or smartboard is used to open musicogram video recordings and prepare worksheets. The implementation by teachers is carried out in two different ways in accordance with the planning: watching and accompanying the music. Direct quotes from teachers regarding their opinions are provided below:

- “I find musicogram applications on the internet. I do not know enough to create them myself; I am not competent. I do not have any friends around me who can do it.” (T1)
- “I open videos on YouTube. We watch them with the children; we have a projector in our classroom, so we project it from the computer.” (T15)
- “We have a smartboard in our classroom, and we project the video; we try to do the same movements with our hands.” (T18)
- “First, we watch the musicogram from the video. I prepared worksheets for two of them; the children followed the lines with their fingers. Sometimes, they struggle to follow the music, and they finish quickly; I look at their hands.” (T24)
- “We only watch and try to imitate the movements. Finger movements are difficult. Clapping and knee tapping are easier.” (T1)
- “We just watch and try to imitate the movements. Familiar songs are easier. ‘Old MacDonald Had a Farm’ is easier for the children.” (T27)

Theme 4: Expectations and Suggestions for Listening Activities

Teachers were asked, “What are your expectations and suggestions for listening activities in music activities?” Their responses are summarized and presented in the table below, categorized into seven groups. Direct quotations from teachers regarding their expectations and suggestions are also included in the table according to their respective categories.

Table 6 Teachers’ Expectations and Suggestions Regarding Listening Activities in Music Activities

<table>
<thead>
<tr>
<th>Categories</th>
<th>Sub-Categories</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher’s Professional Development</td>
<td>Pre-service education</td>
<td>T1, T5, T8, T10, T11, T17, T20, T25, T29, T30, T33</td>
</tr>
<tr>
<td></td>
<td>In-service training</td>
<td>T2, T3, T6, T15, T19, T21, T22, T27, T31</td>
</tr>
<tr>
<td></td>
<td>Ministry of Education (MEB) activity examples</td>
<td>T1, T2, T5, T7, T8, T10, T11, T12, T13, T15, T16, T17, T18, T23, T24, T26, T28, T29, T30, T32</td>
</tr>
<tr>
<td></td>
<td>Practice-based special courses</td>
<td>T3, T4, T6, T9, T14, T19, T20, T21, T32</td>
</tr>
<tr>
<td></td>
<td>Thematic meetings (conferences, symposiums, etc.)</td>
<td>T3, T6, T14, T18, T23, T24, T28</td>
</tr>
<tr>
<td>Classroom Materials and Equipment</td>
<td>Lack of musical instruments</td>
<td>T4, T6, T8, T12, T13, T14, T19, T21, T23, T27, T30</td>
</tr>
<tr>
<td></td>
<td>Insufficient musical materials</td>
<td>T1, T3, T7, T9, T17, T18, T20, T22, T28, T29, T31, T33</td>
</tr>
</tbody>
</table>
When Table 6 is examined, expectations and recommendations regarding listening activities within the scope of music education are evaluated in categories such as teacher’s professional development, classroom materials and equipment, music activities, children’s developmental characteristics, parental involvement, and musicogram.

Direct quotations related to teachers’ views in the “professional development” category are provided below:

- “Before starting the profession, teacher education should equip graduates with expertise in this field. I believe that universities should train by experts in the field of music.” (T5)
- “Teachers working in the field of music should also be knowledgeable about early childhood education. Our music teacher came from a conservatory and had a beautiful voice, but we were always singing songs in class.” (T8)
- “What I feel lacking is the planning of music activities. Our ministry can provide activity examples in this regard. Researching on subjects I do not know takes time. Since I do not know musical notation, we find new songs on the internet.” (T15)
- “I have never seen or heard of any application related to musical stories. In other words, in-service training on music activities should be comprehensive. It should not be limited to just Orff.” (T19)
- “First, the teacher should change their style, be open to self-improvement. Because there are conferences and symposiums on these topics. They should attend.” (T28)
- “There are very good courses that teachers can attend. Like the Body to Play workshop, we learn a lot about the field.” (T32)

In regards to the category of “classroom materials and equipment,” the direct quotations of the teachers’ opinions are provided below:

- “We have a shortage of materials. Music classrooms could be organized for this purpose.” (T7)
- “I believe there should be a music classroom; these separate areas attract the attention of children more.” (T11)
- “We do not have musical instruments; we could have a piano. Preschool teachers should play musical instruments.” (T23)
- “I play the ukulele; I think it should be taught to everyone.” (T30)
- “For Musicograms, we need a smartboard; it would be easier to follow without a separate worksheet.” (T18)
- “I do not think maracas should be made with plastic bottles; the sounds come out poorly, and children cannot learn the correct sounds.” (T16)
- “Costumed dances are nice; it would be good if the Ministry of Education sent musical instruments and costumes. Musical instruments and costumes
are as valuable as other play materials, in my opinion.” (T31)

• “Nowadays, you can make music with materials; we sing songs with spoons and pipes in the garden, and it is very loud because of that.” (T29)

In the “music activities” category, the direct quotations of teachers’ opinions are as follows:
“Music teachers should conduct music activities.” (T9)

• “We should also use folk songs; classical music is always recommended.” (T13)

• “Information about rhythm exercises should be provided.” (T17)

• “I have never seen an example of a music story; I have never even heard of it.” (T19)

• “We do repetitions, and some of the children sing. I think different music genres should be played for the children.” (T27)

• “It would be great if celebrities sang children’s songs.” (T22)

• “It is wrong to always use the same music for transitions; we have a lack of knowledge in terms of music activities.” (T22)

• “Children’s songs are not very meaningful; they should be instructive. New compositions can be made in this regard.” (T30)

• “I use music to calm down the classroom, and it works very well.” (T32)

• In the “age and developmental characteristics” category, the direct quotations of teachers’ opinions are provided below:
  • “I believe the ability to distinguish sounds comes naturally. Working with sounds also enhances literacy.” (T14)
  • “Music supports motor development, so a spacious area is necessary.” (T22)
  • “I started playing music for my daughter when I was pregnant. It’s crucial for the development of auditory perception.” (T19)
  • “I think music calms children down; it can even be used during naptime. It works well during transitions between activities.” (T27)

Regarding the “parental involvement” category, the direct quotations of teachers’ opinions are as follows:
  • “Parents should be informed about music activities because they request performances from us. Parents who are musicians can help children with musical instruments.” (T9)
  • “I request costumes from parents; some of them know how to sew. Parents who play musical instruments receive a lot of attention.” (T5)
  • “One parent brought their child’s flute and melodica when they started elementary school. Musical instruments could be requested from parents.” (T20)

• “Parents who are involved in music should be encouraged to participate in activities.” (T27)

In the “Musicogram” category, the direct quotations of teachers’ opinions are as follows:
  • “We even mispronounced the name of Musicogram; detailed information should be provided because there is no detailed information available online in Turkish.” (T3)
  • “Turkish songs, the ones we know as children’s songs, attract the attention of children more. In this regard, if we have more Turkish examples...” (T24)
  • “Examples of good Musicogram applications can be gathered from teachers who excel at it.” (T27)

Discussion and Conclusion

According to the research findings, it has been determined that teachers primarily incorporate song activities (singing and listening), rhythm activities, and to a lesser extent, musical games (rond), and creative movement and dance activities within the framework of music activities. Research indicates that the most typical music activity is singing. In their study comparing cross-cultural preschool music activities, Bautista et al. (2023) found that in Hong Kong, preschool teachers mostly engage in singing and sound activities, while in Spain, preschool teachers focus more on rhythm activities. They also observed that creative music activities were more frequently carried out in Hong Kong compared to Spain. It was concluded that there were discrepancies between music curriculum and actual practices in both cultures, with repeated music activities being the most common. A study by Bautista et al. (2018) on music activities in Singapore found that singing and moving to music were the most typical music activities. Teachers particularly sang traditional children’s songs to
children and provided them with instructions to perform specific movements while singing these songs. In another study by Ho and Bautista (2022) that examined the quality of music activities in Hong Kong kindergartens, the most commonly defined terms in music-related sections were related to the development of children’s sensory abilities through music experiences, including singing, rhythm, beat, movement, and instrumental music. However, activities aimed at promoting musical creativity and self-expression were rarely mentioned. Music activities in Hong Kong kindergartens did not explicitly address children’s expression of emotions, exploration, experimentation, improvisation, invention, or their creativity with music or sound. When considering the research findings along with similar studies conducted in different countries, it can be said that opportunities for children to engage in activities such as sound exploration, using their own bodies, eco-friendly instruments, nature sounds, or technology for listening and producing sounds are rarely provided. Similar results have emerged in cross-cultural studies as well. Music activities mainly revolve around singing in large groups, and the communicative language of music and its potential as an exploratory domain are often overlooked (Kandır & Türkoğlu, 2015; Türkoğlu et al., 2020).

In the research, it has been determined that teachers predominantly conduct listening activities in music activities, focusing mainly on song listening and singing, as well as music listening. Besides these, it was found that teachers rarely include activities such as listening to sounds, distinguishing between sounds, sound production, and musicogram activities within their listening exercises. Nevertheless, most teachers feel confident in their ability to conduct listening activities, although some believe they need improvement in this aspect. Based on the research findings, it can be concluded that teachers need competence in actively engaging children in music-listening activities to provide musical diversity and recognize and introduce different sound characteristics. Teachers’ statements suggest that listening activities primarily revolve around listening to songs, and the music repertoire is not diversified with different music genres. One reason for this is the limited focus on Visual Arts, Music, Drama, and Dance in preschool teacher training programs, which results in preschool teachers being ill-prepared to teach art and creativity to young children (Yeung & Bautista, 2023). However, this lack of preparation can lead to teachers underestimating the importance of music in child development and education, assigning music a secondary role compared to other learning areas (e.g., language, early literacy, mathematics), and consequently allocating little space to music in the curriculum (Kim & Kemple, 2011). The lack of preparation can lead teachers to have insufficient knowledge, skills, and pedagogical competencies in music education, negatively affecting their confidence and self-efficacy beliefs (Bautista et al., 2022).

According to the research findings, the majority of teachers were found to be unaware of what a “musicogram” entails. Only a few teachers mentioned musicograms as activities related to following music with hands and fingers or following songs in this manner. Additionally, it was observed that some teachers referred to musicograms as “musicomoviegrams,” defining them as musical animations. When teachers who were conceptually aware of musicograms were asked about their selection, planning, and implementation, it was found that they mainly relied on the internet. Specifically, when asked about the musicogram examples they chose and used, it was determined that they selected musicogram videos from YouTube without considering theoretical knowledge or content. These selected musicogram videos mostly featured hand and body percussion activities and “musicomoviegrams,” such as “Hand and Foot Drumming,” “Skeleton Dance,” “Body Percussion,” “Statue,” “Clap Along,” “Hand Drumming on a Table,” “Opening and Closing Hands,” and “Using Balls.” Furthermore, it was noted that most of the selected musicograms contained well-known children’s songs like “Daha Dün Annemizin Kollarında Yaşarken” and “Ali Babanın Çiftliği.” Türkoğlu et al. (2023) found that digital music and well-known children’s songs were often preferred in recent years, especially in highly viewed musicogram content. They also noted that there was a lack of alignment between the symbolic representation used in musicograms and the melodic patterns of the compositions, and there was almost no explanatory information or narration provided. They suggested that although musicograms for early childhood are highly prevalent on social media platforms, the content needs to be enhanced to include more...
comprehensive theoretical and practical information. The research findings indicate that most teachers are unaware of musicograms, do not consider them as a technique in active listening exercises, and only a few teachers, without theoretical or practical knowledge, implement musicograms randomly selected from the internet. However, using musicograms, following Wuytack’s approach, involves two stages: starting with an individual musicogram that the whole class uses, and then using small musicograms that allow individual work for each child. Digital boards or similar equipment and devices can be encouraged for classroom use (Azorin-Delegido & Villodre, 2019). In addition, it was observed that teachers were not familiar with the difference between musicograms and musicomovigrams, often using the term “musicogram” to describe activities related to rhythm, movement, or musicomovigram activities. Recent developments in Information and Communication Technologies (ICT) and digital tools, including digital TVs, digital boards, smartphones, and tablets, have transformed music education, prompting the reformulation of educational fundamentals and concepts. These advancements have also influenced musicograms in recent years, allowing for the technological enhancement of music’s symbolic representation through animated graphics, giving rise to a new concept known as “musicomovigrams.” This concept involves presenting unusual notations (such as those found in contemporary music) in an animated format, synchronizing visual and auditory elements to represent some aspects of music that can be actively explored through music listening (Rubio et al., 2017).

As a result of the research, teachers’ expectations and recommendations regarding listening activities have been identified. These include requests for professional development for teachers, addressing the deficiencies in classroom materials and equipment, conceptual songs for music activities, addressing the lack of theoretical knowledge, the need for subject-matter expertise, considering children’s age and developmental characteristics, requesting various materials through parental involvement, and the need for theoretical knowledge support for musicograms. Ho and Bautista (2022) found that pre-service and in-service preparation for music education in Hong Kong’s early childhood education was inadequate. Consequently, teachers lacked confidence in teaching music to children, and their competence was limited. Wong et al. (2023) emphasized that teaching experience was a significant factor in determining early childhood teachers’ preferences for professional development in music. They found that teachers preferred professional development activities led by music educators, which integrated pedagogy and domain knowledge, focusing on musical creativity. New and experienced teachers showed more interest in learning to play musical instruments and observing other teachers. Advanced teachers tended to focus on professional development related to dance and a general enjoyment of music. Ho and Bautista (2022) noted that Hong Kong kindergarten teachers perceived music as a secondary learning area and mainly used it to manage classroom routines, transitions, and teaching other subjects. They rarely implemented specially designed activities to encourage children’s musical creativity and self-expression. However, they felt good when the children worked as a group, such as moving and singing together. Everyone enjoyed themselves, and children loved music and movement just for music’s sake. Therefore, using verbal music in music activities might not be particularly effective in achieving musical goals (Blasi & Foley, 2006). Most countries have failed to adequately educate teachers to meet the musical expectations in contemporary early childhood education curricula, resulting in the inevitable impact on children’s learning and development (Bautista et al., 2022). For these reasons, music is recognized as a fundamental learning area in curriculums worldwide, particularly in the early childhood period. Children derive various cognitive and academic benefits from music education that are appropriate for their age and developmental level. Moreover, music, in addition to using movement, influences a child’s developing brain (Blasi & Foley, 2006). However, the current state of music education in early childhood settings impedes children from reaping the many benefits and positive outcomes associated with music education (Campbell & Scott-Kassner, 2009). The research findings indicate that teachers require support both before and after service, emphasize the need for the presence of subject-matter experts in music activities, highlight the use of music as a tool with conceptual content rather than artistic content, express concerns about material and equipment shortages, and reveal
their lack of theoretical and practical foundations, especially regarding the use of musicograms in listening activities. However, teachers generally do not introduce various types of music with different characteristics such as dynamics, meter, and tempo into their classrooms and do not express a need to include them. In contrast, children in the early childhood period are not only open to different types and styles of music but also enact changes in the most stable and prominent characteristics of music, such as dynamics, meter, and tempo, through movement. The connection between music perception and movement is also supported by studies on the role of mirror neurons, demonstrating that the auditory modality can access the motor system (Kohn & Eitan, 2016). Highlighting values outside the primary purpose of music and attempting to legitimize art by referring it to non-aesthetic values can harm the advancement of music education. This may reduce the lasting personal value of music for societies, emphasizing the need to support music for its intrinsic meaning and importance (Rauscher & Hinton, 2011).

Recommendations

When considering the research findings together:

• Continuous development during formal education and various forms of professional development and training should be supported to enhance teachers’ understanding of music activities’ purpose and ability to conduct them more creatively. Pre-service and in-service training programs should provide teachers with more opportunities for music-making, skill applications, pedagogical observation, guided practice, and collaboration.

• To increase musical learning opportunities in the early childhood period, contributions from various stakeholders should be encouraged, and artistic development should be promoted.

• Workshops on musicogram usage should be organized to raise awareness of active listening activities, providing teachers with correct examples that have melodic and rhythmic integrity.

• Teachers should be given access to information and communication technologies and practical training should be provided through classroom-based applications to integrate music and technology effectively.

References


