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Music Training as a Therapeutic Medium for Students with Autism at Sforzando Music School

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ABSTRACT

This study explores the effectiveness of music training as a therapeutic medium for students with autism at the Sforzando Music School, using a descriptive qualitative approach. Data were collected through passive participant observation, structured interviews with the school founder, teachers, and parents, and document analysis. The analysis shows Sforzando's structured program, which covers nine aspects of development (Salim, 2006) and five main benefits of music as therapy (Salim, 2009), significantly supports the holistic development of autistic children. Case studies of five students demonstrate substantial progress in communication, self-regulation, and social interaction. This study concludes that music training at Sforzando is not merely an additional activity but a powerful therapeutic tool for the comprehensive development of autistic students.

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1. INTRODUCTION

Since ancient times, music has been closely intertwined with human life, becoming an integral part of our cultural and emotional journey, capable of touching the soul and influencing emotions. In recent decades, research on music as therapy has grown rapidly, demonstrating significant therapeutic potential (Bradt & Dileo, 2014). Music therapy is the use of music to achieve therapeutic goals and has been proven effective across various mental and physical health contexts (Halodoc, 2021). This therapy can be carried out in various ways, such as listening to, participating in, or creating music (Salim, 2006:24).

Many studies have shown the positive effects of music therapy on mental health, such as reducing symptoms of depression and anxiety (Bradt & Dileo, 2014) and improving mood and reducing stress (Thoma et al., 2013). Music serves as a means of emotional expression and coping with complicated feelings. Additionally, the physiological benefits are significant, with music affecting heart rate and blood pressure, boosting the immune system, and reducing pain (Chanda & Levitin, 2013).

In the field of mental health, music therapy is increasingly being used to support children with special needs, including those on the autism spectrum. The prevalence of autism is estimated to be 1 in 160 children worldwide (World Health Organization (WHO), 2021). The increase in the number of autism spectrum disorder (ASD) diagnoses emphasizes the importance of exploring a variety of therapeutic methods. Music therapy, which combines musical elements with therapeutic techniques, has been proven to provide

significant benefits for autistic children in communication, social interaction, and emotional management (American Music Therapy Association (AMTA), 2020). A study by Geretsegger et al. (2014) found that children involved in music therapy programs experienced noticeable improvements in communication and social interaction skills. They emphasized that "Music therapy can improve social and communication skills in children with autism who often face challenges in establishing social interactions with others" (Geretsegger et al., 2014).

Autism is a developmental condition that affects how a person communicates, interacts socially, and expresses behavior. According to Suryana (2004), autism is characterized by challenges in establishing social interactions, difficulties in communication, and a tendency to exhibit repetitive behaviors. The causes of autism are thought to involve a combination of genetic and environmental factors that affect brain development during pregnancy and early life (Danuatmaja & Rozaline, 2003). The severity of autism symptoms can vary greatly, ranging from mild to more complex, and often includes difficulties in understanding social cues, communicating effectively, and managing emotions and behavior (Hadis, 2006).

Sforzando Music School (Sf), founded in 2009, uses music training as therapy for children with special needs, particularly those with autism spectrum disorders. With a structured approach and the support of experienced teachers, Sforzando creates an environment that encourages these children to learn and interact through music, while also helping them hone their social and emotional skills and creativity, which play an important role in their daily lives. Creativity is the ability to think of new and valuable ideas. Creativity is a characteristic that constantly seeks new things (Suwahyono et al., 2023). Various music therapy techniques are used, including musical improvisation, which supports self-expression and enhances listening and collaboration skills (Pramudita, 2020). The use of familiar songs is also effective in facilitating interaction (Nind, 2019). Data from Cochrane (2020) indicate significant positive effects of music therapy for children with autism, particularly on communication and social behavior.

Based on this background, this study examines how music training is applied and functions as a therapeutic medium for students with autism at the Sforzando Music School.

2. METHOD

This study uses a descriptive qualitative approach, intending to explore in depth the experiences of the research subjects (Moleong, 2011:6). Through this method, the data produced is in the form of descriptive descriptions in written and oral narratives from individuals, as well as behavior that can be observed directly (Moleong, 2000:3).

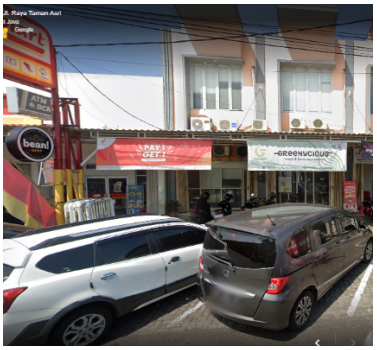

Figure 1. Research location of the Sforzando Music School in Pondok Tjandra – Sidoarjo (Source: Researcher, 2025)

The research was conducted at the Sforzando Music School in Sidoarjo over a period of six months (December 2024 - May 2025). The research objectives included: the reasons students with autism chose to participate in music training as a form of therapy, and the stages of the therapy process they underwent. Primary data were collected through interviews with the founder of Sforzando Music School (Fransiska Sri Setyowati), the special class coordinator and teacher (Agnes Indah Kusuma), the music coordinator and teacher (M. Olivia Lembono), the teacher's assistant (FX Kartika Ratri), and the students' parents. Secondary data sources included books and articles related to research methods and music therapy.

This study uses data collection techniques described by Sugiyono (2009), including observation, interviews, and document analysis. The observation process was conducted using the passive participation method, as described by Sugiyono (013). Through this approach, the researcher was directly at the research location to observe the situation without being directly involved in the interaction, even though the subjects were aware of his presence as an observer. This observation was conducted with the aim of gaining a more comprehensive understanding of the school's general conditions, evaluating the available facilities, analyzing the learning system in place, and observing in detail the music training process. Furthermore, structured interviews were conducted. These interviews were aimed at teachers and parents of autistic students at Sforzando. The goal was to gather detailed, specific information about the children's development during the music training program. The last method was document study. Data collection using this technique involved analyzing various important documents, including student and teacher data. In addition, a review of the learning tools and media used, particularly musical instruments, was also conducted. The documents analyzed included various formats, ranging from manuscripts and music therapy video recordings to supporting images relevant to the research, as described by Moleong (000).

The validity of the data was tested using credibility criteria (Sumaryanto, 2010:112). Source triangulation was carried out by comparing data obtained through observation, interviews, and documentation from various informants—such as special education practitioners, music teachers, and parents—along with relevant official documents. The similarity of data from various sources indicates high validity.

Data analysis in this study was conducted interactively and continuously until all stages were completed, following the model proposed by Miles (994). According to Sugiyono, Click or tap here to enter text. Accompanied by verification. The first step in this process is data reduction, which involves carefully summarizing all the data collected. In this process, the researcher will select the elements most important and relevant to the research focus and eliminate or discard information considered irrelevant (Sugiyono 2009). After the reduction process, the filtered and selected data are moved to the presentation stage. The information is then organized into a systematic narrative to provide a clear picture of the music training process and the benefits it produces. The final stage in this analysis is drawing conclusions and verification, in which researchers formulate new findings or develop a more comprehensive understanding of the object under study based on the data presented (Sugiyono 2009). This process is carried out to ensure and verify that the music training provided is truly an effective therapeutic medium for students with autism.

3. RESULT

Sforzando Music School (Sf), founded in 2009, focuses on improving musical and language skills. Sforzando develops flexible curricula and teaching materials tailored to students' developmental stages and learning styles. For students with special needs (Neurodivergent), Sforzando implements an individualized teaching approach, supported by ongoing teacher training. The admission process for students with special needs includes parent interviews, assessments, program goal setting, and regular progress evaluations/reports.

3.1. Implementation of Music Training at Sforzando for Children with Special Needs with Autism Symptoms

The implementation of music training at Sforzando is based on Djohan's music therapy concept (Salim, 2006), which encompasses nine developmental aspects. Each training session lasts 45 minutes, with the teacher selecting 3-4 training points per meeting (10-15 minutes each), adjusted to the students' conditions and program targets.

3.1.1. Improvement of Gross and Fine Motor Coordination

Music therapy is efficacious in improving motor coordination in autistic students, and this effect is divided into two types. First, gross motor coordination is trained through large-body movements such as dancing, jumping, and clapping along to songs, which aim to improve eye-hand-foot coordination and build muscle strength. Second, fine motor coordination focuses on small movements, such as grasping and writing, using instruments such as the piano or maracas. The use of maracas, in particular, helps train hand-eye coordination, develop rhythm awareness, strengthen fine motor skills, and improve social skills through activities such as taking turns while playing.(Salim, 2006:145). Emphasis is placed on repeating simple rhythmic patterns and gradually varying the tempo.

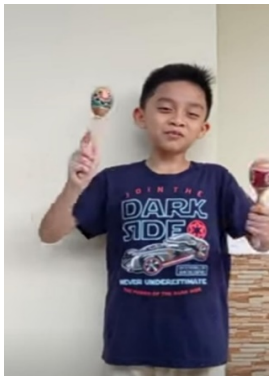

Figure 2. Students playing maracas while singing. (Source: Researcher, 2025)

3.1.2. Training Sensory Perception and Sensory-Motor Integration

Students with autism often have difficulty processing sensory information. Music therapy helps them recognize and respond to various sensory stimuli (Salim, 2006:145). Listening to active music with various musical instruments is effective for improving auditory identification, understanding of rhythm and dynamics, coordination of sensory input and motor movements, and emotional regulation. One aspect expected in teaching and learning activities is practical learning. Effective learning is learning that students enjoy and that enables them to acquire specific skills, knowledge, and attitudes. (Kristiandri et al., 2021)

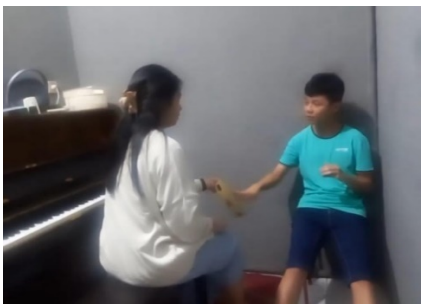

Figure 3. Students are invited to interact by playing the tambourine after hearing the sound through an audio recording (Source: Researcher, 2025)

3.1.3. Increasing Attention Span

Improving the attention span of autistic students is a challenge that can be addressed through engaging, interactive musical activities (Salim, 2006:145). Examples include games that involve following rhythms or singing simple songs. These activities help students stay focused and engaged for more extended periods. With consistent practice, students can develop this important skill for future learning.

3.1.4. Development of Body Awareness

In music therapy, students are taught to recognize their body parts and how to move them (Salim, 2006:145). For example, through dance movements accompanied by music, students can learn about the coordination between body movements and rhythm. This body awareness also helps them understand the space around them, which is very important for social interaction.

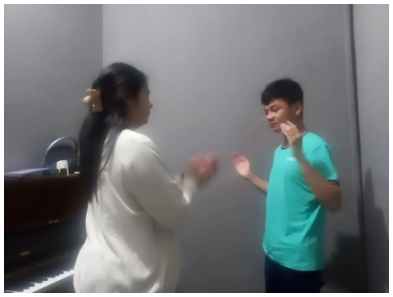

Figure 4. The teacher invites students to follow the movements according to the rhythm (Source: Researcher, 2025)

3.1.5. Development of Self-Concept

Through musical expression, students can discover and express their identity (Salim, 2006:145). Singing or playing musical instruments teaches them about themselves and how they want to be seen by others, which is an important step in building their confidence and self-esteem.

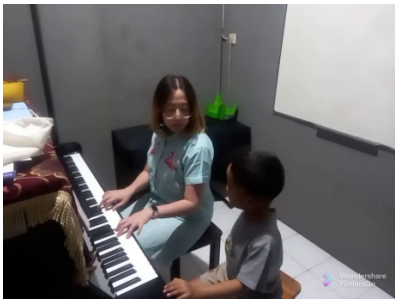

Figure 5. Teachers train students to follow the rhythm and express emotions through music. (Source: Researcher, 2025)

3.1.6. Improvement of verbal and non-verbal communication skills

Music has the potential to serve as a bridge in building communication, both verbally and through nonverbal expression (Salim, 2006:145). In practice, music therapy often involves interaction between teachers and students, which can indirectly help improve their ability to communicate with others. Edgerton (1994) also emphasizes that this therapy contributes to the development of motor coordination, communication behavior, and language skills.

3.1.7. Supports the learning process of basic concepts at both the academic and pre-academic levels.

Music can be used to teach various concepts such as numbers, letters, and shapes (Salim, 2006:145). Songs that teach the alphabet or numbers can help students learn in a fun way. This can also create positive associations with learning, which is very important for their future academic development.

Figure 6. The teacher encourages students to communicate by singing while learning academic concepts through songs (Source: Researcher, 2025).

Figure 7. Students choose number cards that match the lyrics of the song being sung (Source: Researcher, 2025)

Figure 8. Students match colors according to song lyrics (Source: Researcher, 2025)

3.1.8. Helping to correct and change ritualistic habits and repetitive behavior patterns

Music therapy can help by creating new, more positive routines (Salim, 2006:145). This not only helps reduce repetitive behavior but also opens new spaces for students to express themselves in more meaningful ways. For example, the teacher plays a simple rhythm that students like (e.g., the song "Baby Shark"), but gradually adds variations by speeding up or slowing down the tempo, or changing the rhythm of the song.

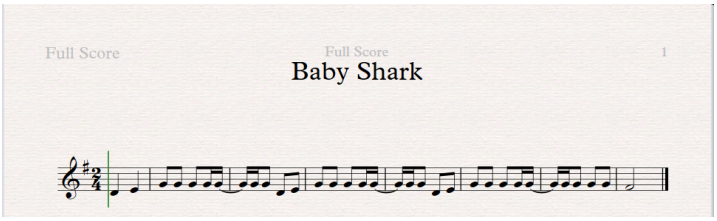

Figure 9. Notation of the song "Baby Shark" that can be played from slow to fast tempo. (Source: Transcription by Gregory Raphael Liadi, 2025)

3.1.9. Reducing anxiety, anger levels, and symptoms of hyperactivity.

Music can calm and stimulate, depending on its type(Salim, 2006:145). Managing their emotions through music helps students cope better with difficult situations. According to Benarous & Cohen (Mayer-Benarous et al., 2021), emotional development through music therapy is significant for children with autism. Music can stimulate areas of the brain involved in emotional regulation, such as the prefrontal cortex and the limbic system (Tarazi, 2018).

3.2. The Function of Music Training at Sforzando for Children with Autism Symptoms

The function of music training at Sforzando is based on the five main benefits of music therapy described by Djohan (Salim, 2009:245).

3.2.1. Thinking and Feeling Directly

Students with Autism Spectrum Disorder often have difficulty processing emotions and information verbally and abstractly. Music, as a concrete and sensory medium, offers a unique approach in supporting

students' emotional and cognitive development (Salim, 2009:245). Music becomes a bridge for autistic students to understand and experience emotional changes without using words. This is important, as autistic students tend to be more responsive to nonverbal stimuli (Geretsegger et al., 2014).

3.2.2. Getting the opportunity to express feelings to be explored and processed together with the therapist

In music therapy, students are allowed to "fill" their feelings, thereby exploring and processing emotions through collaboration with the teacher (Salim, 2009:245). Through this process, students are given a safe space to express themselves, while also being helped to understand and manage emotions that are difficult for them to express verbally. The therapeutic relationship between students and teachers is the primary foundation, building trust and a sense of security.

3.2.3. Supporting clients in expressing their thoughts and feelings through nonverbal channels, which they may not have explored due to their tendency to communicate verbally

The biggest challenge for autistic students is often their ability to express their thoughts and feelings. Music therapy offers an easier, more comfortable channel for nonverbal expression (Salim, 2009:245). Students who participate in music therapy show progress in expressing their feelings, whether through body movements, vocalization, or musical improvisation (Pramudita, 2020). This shows that music can be a bridge between their inner and outer worlds.

3.2.4. Obtaining associations that are difficult to reach through verbal understanding.

Music has strong suggestive and associative powers, serving as a bridge to connect individuals with parts of themselves that may not be expressible verbally (Salim, 2009:245). Every song or melody can evoke certain memories, helping students rediscover or recall specific feelings. Music has a unique ability to touch hidden emotions, providing a valuable starting point for further exploration in therapy (Edgerton, 1994). This is particularly useful in psychological therapy as it can help students process trauma, confusion, or internal conflicts that they may not be aware of (Salim, 2009:245).

3.2.5. Provides direct physiological benefits compared to verbal approaches, while offering individuals the freedom to explore and try various creative solutions in dealing with their thoughts and feelings.

One of the main benefits of music therapy is the ability of musical rhythms to stimulate fine and gross motor coordination (Salim, 2009:245). Singing also improves breathing control and trains hand-eye coordination. Music therapy can also reduce stress and anxiety levels (Thoma et al., 2013). The freedom to experiment creatively encourages students to explore sounds, rhythms, and movements, and to find creative solutions to emotional or behavioral problems.

3.3. Significant Development of Autistic Students at Sforzando

Observations of five students with autism at Sforzando showed significant progress across various developmental domains. For example, students showed Improvement in verbal communication (from single words to simple sentences), emotional expression, motor coordination, and emotional regulation. They also showed Improvement in stress management, nonverbal communication, understanding of their own and others' emotions, and empathy. In addition, there has been an increase in emotional access, memory association, and emotional problem-solving skills.

This progress, achieved after 2-3 years of music training at Sforzando, demonstrates that music training can be an effective therapeutic medium for students with autism, leading to improvements in social, emotional, and cognitive domains. This is in line with the findings (Wulandari, 2012), which show the effectiveness of karawitan as music therapy as an approach to strengthen communication and support emotional regulation in children with autism, as well as (Petriana, 2015), which found that band music improves memory, social cooperation, and creativity in autistic students. Although the study (ASRI, 2013) used a quantitative approach and focused on classical music, its findings on the Improvement of language skills in children with autism through classical music therapy also support is study's results.

4. CONCLUSION

Music training at Sforzando Music School has been proven effective in helping children with autism spectrum disorder develop emotionally, motorically, and socially, in accordance with Djohan Salim's theoretical framework (2006, 2009). Sforzando's personalized and flexible approach, which involves simple musical instruments, singing, and movement, not only establishes positive routines but also strengthens students' focus and body coordination. Music serves as a safe medium for children to channel feelings that are not easily expressed verbally, facilitating direct emotional understanding and enabling the exploration and processing of feelings through collaboration with therapists. The significant progress observed in students shows that music training is a powerful therapeutic tool for the holistic development of students with autism.

Further research could focus on the use of interactive technologies, such as digital musical instruments or educational applications, to support music therapy for children with autism. The focus would be on examining the effectiveness of these media in helping children express their emotions, practice movement, and communicate in a fun way. The involvement of parents as companions at home is also important to strengthen the long-term impact of therapy.

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