# Application and Effect of Music Therapy in Autistic Children's Education

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Abstract: In recent years, as a new therapeutic method, music therapy has attracted more and more attention. It is one of the best therapeutic methods to use music to communicate with autistic children, stabilize their emotions, train their language communication ability, and turn therapy into interest output. Although it has become an intervention method in the treatment of autistic children, it has not been fully utilized and paid attention to in the treatment and education of autistic children in China. By literature review and case studies, this paper mainly studies the application and effect of music therapy in the daily life and education of autistic children, analyzing the condition and life improvement of autistic children after receiving music therapy. At the same time, the author also explains the shortcomings of the current development of music therapy. In conclusion, music therapy is an effective treatment for autism, but its mechanism and treatment modalities need to be further studied for better application in the treatment of autistic patients.

**Keywords:** music therapy, autistic children, special music education

#### 1. Introduction

There is a large amount of research studying the help and influence of music therapy on autistic children, and the author considers it necessary to further develop this special method of therapy for Autism which starts in infancy and is characterized by language development disorders, social interaction disorders, and repetitive behaviors [1,2]. Music therapy is a kind of psychotherapy. It is the use of the great influence of music on emotions. To be specific, it aims at changing people's emotions through music and ultimately changing people's cognition [2,3].

Through an overview of previous studies and case analysis, the author carries on the research from three aspects: the special music education system, the effect of autistic children receiving music education, and the development of improving music therapy. This paper elaborates on three music teaching methods, namely the Dalcroz body rhythm, Kodaly music education teaching method, and Orff music education thought and teaching method. The teaching concept is discussed in detail and illustrated with examples. The second part shows the remarkable effect and progress of autistic children in language learning and life skills after receiving special music education through real cases. Music therapy is undoubtedly worth trying for autistic patients, but it still faces the problems of less application and low popularization in China. Therefore, this paper also aims at calling on people to pay more attention to music therapy and treat autistic children normally so as to help them integrate into society.

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# 2. The Operation of Three Major Music Education Systems

The three music teaching methods are named after three music educators: Dalcroz, Kodaly, and Orff. These methods can not only be applied to normal music education, but also play an important role and help greatly in the education of autistic children.

# 2.1. Dalcroz Body Rhythm

Dalcroz music education system is founded by Emile Jacques Dalcroz, one of the world's outstanding music educators. Body rhythm refers to the coordinated and regular movements of people's bodies according to the music they hear. This allows the body to perceive the music and develop an interest in it [4,5]. It can make the movement harmonize and get an understanding of the music. It is also a combination of hands and brains to cultivate innovative thinking.

# 2.1.1. Clap Hands and Say Hello

During the class, the teacher will guide the autistic children to learn a simple language while clapping their hands and beating the rhythm, starting with greetings and self-introduction. The use of different pitches (the sound produced) and different rhythm (the rhythm of clapping) can increase children's interest and support muscle memory, thereby improving both language ability and musical rhythm in the regular movement of clapping [5]. Because autistic children have difficulties communicating with others, it is important to take advantage of their repetitive behavior patterns to improve their language and physical coordination.

# 2.1.2. Body Moves to the Music

A 'stop and go' game can be organized for autistic children during class. In the process of the game, the teacher will play happy and lively music, and the children need to move around with the music. When the teacher shouted to stop, the children need to stop immediately [5]. The game uses the perception of music to enhance the physical coordination and understanding of autistic children.

#### 2.2. Kodaly Music Education Thought and Teaching Method

Kodaly teaching method is put forward by Hungarian music educator Zoldan Kodaly. According to Kodaly, the human voice is the best teaching tool. Singing must be in the form of a cappella, just as traditional folk singing [4,6].

#### 2.2.1. Kodaly Music Sign Language

Music therapists use the Kodaly musical sign language (Fig. 1) to teach autistic children about the pitch. Teachers can use the Kodaly sign language to help children with autism understand the pitch more vividly through their bodies and learn to sing some simple songs first [4]. During this period, autistic children can observe similarities and differences, thus improving their observation ability.

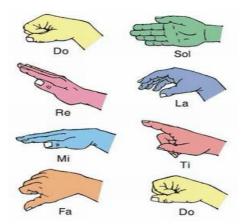


Figure 1: An illustration of the Kodaly musical sign language (source from the Internet).

# 2.2.2. The Application and Practice of the Letter Spectrum

For children with autism, the alphabet is a good option, with the melody marked directly by the initials. Because the alphabet is easier for autistic children to remember, Kodaly's alphabet method is often used as a therapeutic teaching method in the early days.

#### 2.3. Orff's Music Education Thought and Teaching Method

The "Orff music teaching method" was created by Karl Orff, a famous German musician. This is an original music education system. It endows music education with a brand new anti-traditional concept and method, which has had a profound influence on music education in many countries and regions [4,7,8].

#### 2.3.1. Starting with Rhythm

Since autistic children live in their own world and have little communication with the outside world, a comfortable and relaxed communication environment can be created by combining body movements and music based on rhythm [8]. It is also an important way to train the physical coordination of children with autism. The coordination between their hands, eyes, and ears can improve their awareness of the environment perception.

#### 2.3.2. Teaching in the Form of Games

Orff advocates that all should start with children's personal practice and active music learning. Games should be used to inspire autistic children's thinking and stimulate their interest in learning, which can help improve their creativity and imagination [7,8]. Orff music teaching method encourages children to feel and understand music in the rhythm of games, enjoying the fun brought by music and becoming the creator of music. The advantage is that children with autism can participate in music even if they do not know what music is.

#### 2.3.3. Focusing on the Cultivation of Creativity

It is very important to cultivate self-confidence and creativity in autistic children, which can train them to have normal communication abilities in daily life. For example, for the song "Drive a Little Train", children can line up to imitate a little train moving on the ground; in the study of "Zoo", they can play the role of an animal and learn to sing as they play. What Orff advocates is the stimulation of children's interest in music and a chance to give full play to their imagination and creativity [4,7].

Continuous learning and engaging and creative teaching can stimulate the inner musical potential of children with autism, thus improving their abilities not only in learning but also in leading a normal life

Except for the three music teaching methods, there are many other similar methods and systems of music education in music therapy. They all aim to use music to help children with autism develop creativity, self-confidence, physical coordination, language skills, and life skills.

# 3. A Case Study of a Welfare Organization for Autistic Children in Shanghai

In 2008, Mr. Cao Peng, a conductor of the Shanghai Charity Foundation and Shanghai City Symphony Orchestra, and his eldest daughter, Ms. Cao Xiaoxia, head of the Shanghai City Symphony Orchestra, founded Angel Bosom Friend Salon, a Shanghai public welfare organization for autistic children. More than 200 orchestra members formed a volunteer team. In 2018, Shanghai Cao Peng Music Center founded the "Love Coffee--Autism Practice Base and Public Welfare Project", aiming to help every autistic child to develop a skill.

#### 3.1. Stage Performance at Shanghai Oriental Arts Center

In 2019, a wind band performance and a tap dance performance by "Children of the Stars" were held at Shanghai Oriental Arts Center. All the performers were autistic children. Under the leadership of the teacher Cao Xiaoxia and the conductor Cao Peng, the whole performance was brilliantly performed and there was little difference between the autistic performers and normal performers.

Moreover, the volunteers of the Shanghai City Symphony Orchestra often go to Angel Friend Salon to play games with autistic children through music. At first, children are usually exposed to keyboard instruments or percussion instruments, and they just need to make the instrument sound. Gradually, they are taught rhythm. The salon holds concerts regularly and has performed in many famous concert halls at home and abroad [9].

As autistic children have language barriers, music, as a special way of language and communication, can bring them a sense of security and comfort. Volunteers found that autistic children respond to music. Studies have also shown that autistic children's brains are stimulated to redevelop during music therapy interventions [9].

#### 3.2. Social Practice Base "Love Coffee"

"Love Coffee" is a special coffee shop where autistic children and teenagers from Angel Bosom Friend Salon serve as baristas. Guests can pay a fee to come in and communicate with them. In the morning, these baristas make coffee for guests, and in the afternoon, they learn musical instruments and rehearse. The establishment of this coffee shop is not a random decision. It is based on a concern about a companion of autistic children. Since making coffee is easy to learn and costs only a little time, autistic children can have more time to communicate with volunteers and learn to integrate into society. They talk to customers about music, and sometimes, they play the music they have learned to customers.

Cao Xiaoxia and the parents of autistic children know that when they walk out of this special coffee shop, they will face a real society, and too much tolerance will make exploration meaningless. "Ask them as you would to a regular waiter." Cao Xiaoxia said, "Don't love too much."

The children who first joined the Angel Bosom Friend Salon have now become a group of young performers on the stage. They can already communicate with family, friends, teachers, and even strangers. Although there is still a certain gap between them and normal children, this is a great achievement for autistic children and a miracle brought by music [9].

# 4. Deficiencies in the Development of the Music Therapy System

# 4.1. A Lack of Organizations or Institutions

At present, there is a lack of public welfare organizations or institutions, such as Angel bosom Friend Salon, using music to help autistic children. In the vicinity of the "Love Coffee" practice base, many parents of children with autism wander around every day, hoping that their children can join them. However, due to limited resources and in order to ensure the quality of teaching and treatment, Angel Bosom Friend Salon cannot accept a large number of children with autism. Even in Shanghai, a first-tier city, there is a lack of such organizations and institutions to provide help for autistic children, not to mention other second-tier and third-tier cities in China. Many poor families find it difficult to afford the fees. Only with these public welfare organizations of music therapy can more autistic children receive special music education and change their future.

# 4.2. Over-protective Behaviour

Many parents of autistic children prefer their children to stay at home and not let them do anything by themselves. However, the earlier the intervention, the more effective it is, because the earlier exposure to music, the sooner the brain nerve regrowth can be stimulated. Long-term protection at home and no contact with the outside world will only delay the child's treatment and recovery. Some adults with autism have been confined to their homes for long periods of time and have increasingly serious behavioral problems, leading to acts of violence and self-harm.

When communicating with autistic children, people should have patience and tolerance, but definitely not unlimited tolerance and excessive protection. In the practice base of "Love Coffee", an autistic child once asked a female customer to hold his hands. Out of sympathy, the customer held a tolerant attitude and did not refuse his request. Upon finding out this, Cao reminded her that she should simply refuse the child's request just as she would refuse any other stranger. Because Cao Xiaoxia and the parents know that the children have to face a real society. Too much tolerance will make the exploration meaningless. Reality is harsh and does not change just because they are autistic. What people need to do is to be patient and tolerant to autistic children but not overprotective.

# 5. Conclusion

In a word, music therapy can improve the nervous and anxious mood of children with autism and gradually stabilize their emotions. Music can be used to make children with autism gain confidence and provide them with a relaxed mood, so that they can integrate into society as much as possible [10]. Although it is almost impossible for autistic children to rehabilitation completely, both scientific evidence and practice have proved that music therapy can intervene to alleviate autistic children's symptoms. Children with autism cannot stay at home forever under the protection of their families. One day they will have to face society alone. What people should not do is overprotect them and treat them with unlimited tolerance. Special education should be offered to teach them how to live alone in this world. There is a need to establish more public welfare organizations for autistic children, so that they can learn a skill and suffer less discrimination and obstacles.

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