

# Current situation of autism rehabilitation institutions in Shangqiu City in China

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## Abstract

Music therapy is playing an increasingly important role in the rehabilitation of children with autism spectrum disorder. The unique musical perception ability and good musical response ability of children with autism spectrum disorder become tools for therapists to overcome the non-verbal communication of autistic children, so that therapists can use the unique non-verbal nature of music to enter autistic children and promote the success of rehabilitation training for autistic children, so as to improve, restore and enhance the physical and mental ability of autistic children. This article presented current situation of autism rehabilitation institutions in Shangqiu City in China.

**Keywords:** Current Situation; Autism Rehabilitation Institutions; Shangqiu City; China

## Introduction

### Development and current status of music therapy for children with autism

Almost all autistic children (more than 95%) in the sensitive stage of music (under 12 years old) have good musical response ability. One of the reasons why music is attractive is that music can transcend language and lead to the emotional world, and language and emotional disorders are the problems of autistic children.

Music is an innate human ability, and when a person is still an embryo, he is already in a rhythmic sound environment. For example, the rhythm of the mother's heart, the beating of the pulse, the flow of the mother's blood and so on.

Therefore, from an auditory point of view, people have an innate sensitivity to this rhythmic and rhythmic form of sound, and when a life is still in the womb, the only way he can perceive the outside world is through sound. For children with autism, music becomes a bridge, where musical signals are understood by them and then transformed into musical symbols under the guidance of a music therapist. As a comprehensive discipline and clinical intervention means, the research and clinical application of music therapy in the field of autism has a history of nearly 70 years in developed countries, and was listed as one of the emerging practices by the American Autism Research Center in 2009 (Gao, 2019).

Through research and empirical evidence, the effect of music therapy on autistic children is mainly reflected in the following aspects:

- Promote interpersonal communication and exchange, master social skills;
- Helping children with autism identify and appropriately express their emotions;
- Improving shared attention, memory, and visual recall in children with autism;
- Enhance the ability to process and integrate multiple sensory information;
- Promote the reception and expression of language;

Used to correct inappropriate behavior and learn new behaviors as an alternative to speech therapy that is more accessible to children.

Music therapists design treatment plans for autistic people, using various musical activities such as singing, musical instrument playing, rhythm training, music games, music listening and improvisation, in conjunction with the use of psychology to help them. In countries such as the United States, Australia and Canada, this type of autism therapy is a specialty within the paramedical framework, along with speech, occupational and physical therapy (Gao, 2019).

Music therapy for autistic children should focus on diversity and improvisation. Current music therapies commonly used in mature children with autism include:

RBT Music therapy. Rhythm-based therapy (RBT) Music therapy is a rhythm-based music therapy that helps children with autism reestablish rhythmic movements. When performing RBT, it is important for the music therapist to explore the specific rhythm that each child is comfortable with and needs. If the external music rhythm is consistent with and integrated with his internal physical and mental activity rhythm, the child will accept such a rhythm, and can automatically coordinate life with such a rhythm, which is more comfortable. Therefore, it is necessary to patiently explore the rhythm and corresponding music suitable for the child. At the end of the treatment, the therapist will usually assign the corresponding homework with the parents, and can constantly review the knowledge in the class, and life. At the same time, the therapist will advise parents to listen to the appropriate music for the autistic child, because listening is also important for the child. Haydn's Serenade, for example; The second movement of Mozart's Serenade for Strings; Schubert's Serenade; The Volgava by Smetana; The cantata of Mozart's Piano Sonata No. 8; Hendel's Water Music Suite; Hentel's opera "Alsina", into a pleasant dream; Debussy's Dream. The five elements of traditional Chinese medicine treat the heart CD, liver CD and kidney CD of music; Listen to background music for 25 minutes at a time, 6-8 times a day (Dong, 2023).

Music therapy replaces self-stimulating behavior and shapes correct behavior in the behavioral development of autistic children. Many of the "star kids" have self-stimulating behaviors, such as repeated speech, hand and body movements; Musical activities can provide similar sensory stimulation, allowing these self-stimulating behaviors to occur under more normal circumstances. Through the sound of Musical Instruments such as drums, piano, aluminum piano and other specific vibration and surface touch can provide children with sound and silent tactile and auditory experience. The coordinated movement of small muscle groups is also very important for the neural development of brain cells, which can activate brain cells and promote the improvement of brain function. For example, waving the hand can be replaced by shaking the sand hammer, and repeated speech can be replaced by singing. When children meet the needs of the senses through music, self-stimulating behaviors can be reduced at other times. If they are combined with behavioral training, such behaviors can be effectively controlled (Dong, 2023).

Orff music therapy is characterized by the integration of singing, moving and playing three kinds of music to form a mode of music game. In music education for children with special needs, the Orff music teaching method mainly emphasizes the richness, flexibility and vividness of the means, and plays down the in-depth training of skills. The heuristic teaching form of allowing autistic children to improvise with the accompaniment of music is very suitable for children with different development levels to experience music together. Some researchers used Orff music therapy to conduct rehabilitation training for 8 autistic children

aged 4-6, including language training and rhythmic training for 40min/ time/week, and finally assessed the treatment effect with the child autism rating Scale. The results showed that the number of children following instructions, the number of eye contact, the coefficient of active language and the number of smiles were all improved compared with those before treatment. The score of CARS scale decreased, which proved that rehabilitation training after Orff music therapy can improve the reasoning ability and physical coordination ability of autistic children. Orff teaching system in China has developed relatively mature, every year in a conservatory, music education department and other places have regular training courses organized by experts, and there are related theory books, music CDS and children's percussion music for sale. There are many rehabilitation effects of music therapy on autistic children, in cultivating self-awareness, perception of the body, development of social and play skills, development of verbal and non-verbal communication skills, and the improvement of sensory reception and analysis ability (Lu, 2019).

Nordorf-robbins creative music therapy is an American music therapy master Robbins and others founded, also known as receptive music therapy. Robbins argues that therapists should have the ability to improvise and create music based on the live performance of autistic children. In the percussion music he recommended, he also added a new product, hand piano, which is currently used in children's rehabilitation centers for children with autism and intellectual disabilities, and has achieved good results. The core concept of this approach is that the healing object uses his or her own internal forces through improvisation of Musical Instruments rather than external intervention to achieve healing or rehabilitation. In creative music therapy, children with autism transform their own internal impulses into legitimate musical activities and keep them under conscious control. Through music activities, children discover the deepest feelings of themselves and the world around them, eliminate fear, repression and unhealthy self-control, experience the free expression of self and interpersonal interaction, discover new self, change the old self, enhance self-confidence and independence, and gradually improve the health of the internal self. Children learn how to relate to others in the real world through musical activities and a good relationship with a therapist (Nordoff & Robbins,1977).

Group music therapy. Group music therapy is for a wide variety of children and adults with developmental disabilities. It is organized in groups and uses music activities that have been specially selected, composed, adapted or improvised. Each activity, whether an instrumental arrangement, a song, a musical game, a musical, or some form of action, is chosen to be appropriate to the maturity level of the autistic person and to arouse the interest of as many people as possible. Each piece should be designed to stimulate the patient's participation in the pleasurable and satisfying treatment. When the group's activities are integrated into musical, vivid and meaningful activities, each patient's input can be most effectively realized and rewarded (Lian, 2010)

Summary: While children with autism have deficits in language perception processes, they often retain and even enhance musical hearing skills. Many studies have shown that when auditory stimuli are presented in the form of music, children with autism show a preference for such auditory stimuli and are exposed to them for a longer period of time than their typically developing peers. Children with autism have basic ability to distinguish and remember music melody and rhythm, and there is almost no difference between the performance of children with autism and children with normal development in terms of melody pitch discrimination, rhythm discrimination and melody memory. Musical ability is

almost universal in children with autism, and autistic children are even better at mimicking music than some normally developing children who are musically gifted. Some autistic children even show superior musical perception and superior pitch discrimination. Research confirms that children with absolute pitch are more likely in autism. When children with autism have an increase in music-related perception, their tonal memory also increases. This contributes to the development of long-term melodic memory, as well as long-term tonal memory, and can have a positive impact on the social skills of children with autism. Compared to normally developing children, children with autism have stronger activation of the cerebral cortical language regions when listening to songs, and autistic children's ability in music perception may be their unique advantage, which provides a theoretical basis for the use of music-based interventions. The musical perception ability of children with autism is related to non-verbal cognitive ability and age, but generally has no obvious relationship with verbal cognitive ability and symptom severity. In music interventions, there are many different approaches and interventions that can be used to improve the social interaction skills of children with autism, but there is a common denominator among these approaches. It uses specific musical stimuli to enhance the communication, social, motor, cognitive and other abilities of autistic children through musical experience, and provides the basis for the socialization of autistic children. Music forms complex auditory stimuli through rhythm and melody, and musical stimulation can be used to develop the emotional brain of children with autism as well as their social adaptation.

### **Current situation of autism rehabilitation institutions in Shangqiu City**

The number of rehabilitation education institutions gradually increased in the early 21st century. In the past decade, it has entered a period of rapid development. In 2022, Shangqiu completed rehabilitation assistance for 3,442 disabled children. According to the Shangqiu Disabled Persons' Federation, the goal and task of implementing rehabilitation assistance for disabled children in Shangqiu in 2022 are: to carry out rehabilitation assistance for children with vision, hearing, speech, physical and intellectual disabilities and autistic children who have a Shangqiu household registration or residence permit and meet the rehabilitation conditions, and to help no less than 2,420 people throughout the year, basically realizing that disabled children in need should be saved. In order to do a solid job in the rehabilitation and assistance of disabled children, the Municipal Disabled Persons' Federation improves the rehabilitation and assistance system for disabled children in accordance with the actual situation, and ensures the implementation of the "Implementation Measures for the rehabilitation and Assistance of Disabled Children in Shangqiu City", and various counties (cities and districts) have also introduced implementation measures to improve the rehabilitation status of disabled children and promote the comprehensive development of disabled children. Shangqiu Disabled Persons' Federation adheres to the working mechanism of Party committee leadership, government leadership, DPF leadership, department cooperation, and social participation, and strives to ensure the needs of disabled children's rehabilitation services in accordance with the requirements of the bottom line, weaving dense networks, and building mechanisms, and strives to realize that "everyone has access to rehabilitation services" for disabled children (Wang, 2023).

In addition, strengthen the supervision and inspection of designated rehabilitation institutions, implement dynamic management, and improve the quality of service. The designated institutions in Shangqiu are jointly examined and determined by the Municipal Disabled Persons' Federation, the Civil Affairs Bureau and the Municipal Health Commission, and the approval documents of the designated institutions are issued and reported step by step for the record. By the end of 2022, Shangqiu has 37 designated institutions for rehabilitation and assistance of disabled children, of which 10 are private rehabilitation institutions, 25 are public hospitals, 1 is an education supervisor, and 1 is a civil affairs supervisor. Implement dynamic management of all designated institutions, and strengthen risk prevention and control of all designated rehabilitation institutions to ensure the quality and effect of rehabilitation. In accordance with the principles of combination of sections, hierarchical responsibility, territorial management and who is in charge, DPF associations at all levels work with civil affairs, health and other relevant departments to openly select designated rehabilitation institutions, implement dynamic management, and effectively improve service levels. Actively organize rehabilitation personnel from designated institutions to participate in practical rehabilitation technology training courses for autistic children, practical rehabilitation technology training courses for intellectually disabled children, management training courses for designated rehabilitation institutions, and preschool education training courses for hearing-impaired children in Henan Province, so as to continuously improve the professional skills of front-line rehabilitation personnel. To improve the effectiveness and quality of rehabilitation assistance for disabled children in Shangqiu City (Wang, 2023).

According to the relevant provisions of the "Measures for the Implementation of Rehabilitation and Assistance for Disabled Children in Henan Province", the target of rehabilitation and assistance for disabled children is qualified 0-6 years old children with visual, hearing, speech, physical, intellectual and other disabilities and autistic children. Where conditions permit, the age range of rehabilitation assistance for disabled children may be expanded, and the restrictions on the economic conditions of the families of the recipients of assistance may also be relaxed. In order to benefit more disabled children, many counties (cities and districts) in Shangqiu City should expand the scope and be saved. At present, Yongcheng City is expanded to 7-14 years old; Liangyuan area for special groups of children expanded to 7-10 years old; Suiyang district implementation to 8 years old, will expand year by year to 14 years old; Minquan County has expanded the scope of assistance for disabled children and adolescents from 0-6 years old to 0-14 years old in the third class households and poor households within the county's jurisdiction. In order to let more parents understand the policy, improve the awareness rate of guardians of disabled children about the rescue policy, and benefit more children, Shangqiu Disabled Persons' Federation continues to increase the propaganda work of rehabilitation assistance for disabled children, do a good job in interpreting the rehabilitation assistance policy for disabled children, and disclose the rehabilitation assistance consultation telephone number for disabled children in all counties (cities and districts) to the public (Wang, 2023).

Through promoting the rehabilitation of disabled children, the assisted disabled children in Shangqiu City have been rehabilitated to varying degrees, and their learning ability and life skills have been improved to varying degrees. The satisfaction rate of parents on the rehabilitation training effect is more than 95%. All the rescued children have been filed, and the social effect of "rehabilitation of one person, happiness of the family, and influence of one piece" has been achieved, and this people's livelihood project has truly become a popular project praised by the people (Wang, 2023).

## Conclusion

Music therapy is based on the theories and methods of psychological therapy. With rich musical experience and the form of musical experience and its unique physiological and psychological effects, music therapy can provide physical, emotional or psychological help for autistic children to seek help, gradually help them concentrate their attention, cultivate imagination, increase the opportunity for language interaction, and develop other leisure skills and interests. Thus, the elimination of children's psychological barriers, participation and integration into social life, the rehabilitation of autistic children into a positive role in promoting.

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