

AN INVESTIGATION OF ADVISORY TEACHERS' PERCEPTIONS ON USING MUSIC ACTIVITIES WITH CHILDREN WITH AUTISM SPECTRUM DISORDER¹

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Abstract

In general, children with autism experience developmental delays and difficulty due to neurological impairments. They need expertise who have greater understanding of autism and to be able to live in the society. The advisory teacher is one of the most important key persons for children with autism because they teach the children social skills. This study aims to investigate advisory teachers' aspects in terms of autism children's social interactions after using music activities. The participants consisted of four advisory teachers who had been supervising the students for at least 2 years, and 5 years' experience in taking care of children with autism at the Autistic Thai Foundation (ATF) in Bangkok. Data collection involved interviews conducted by four advisory teachers who observed and evaluate autism children participated in eight activity plans. The study showed the children with autism could express their needs and desires, join their peers for activities, and work well together. These findings underscore the valuable impact of music activities on enhancing the lives of students with autism.

Keywords: Social Interactions/ Advisory Teachers/ Music Activities

¹ This research was funded by the Faculty of Fine Arts's income budget, Srinakharinwirot University, Year 2021.

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Introduction

Children with autism have developmental delays or disabilities occurring as a result of neurological impairment, which involves three main symptoms—social deficits, communication deficits, and emotional deficits². Social deficits, in particular, refer to a lack of verbal and non-verbal expressions or interactions, such as eye contact, reaction, association, participation, expression of mutual interest, and positive response³. It should be noted that this disorder can, however, be congenital or acquired. Children with autism need special care needs, which are, for example, treatments, social services, and education. Obviously, they need an advisory teacher who have specialized training in working with individuals on the autism spectrum. Their role typically involves collaborating with other educators, developing individualized educational plans, implementing strategies to support the specific needs of students with autism, and providing ongoing guidance and support to both students and their families.⁴

Yet, these children also have cognitive difficulties, struggling for learning, social communication, and social interaction; consequently, they cannot live a normal life. Such cognitive impairment not only hampers their socialization but also their spoken and written expressions. It is found that some children with autism can speak but fail to express their needs and desires, so they cannot study in the classroom like normal children. Additionally, it is also found that these children have some undesirable characteristics, such as inability to control emotions, inflexibility, and self-centeredness⁵. Therefore, it is of utmost importance to provide them with comprehensive assistance, additional services, and programs appropriately geared toward their learning needs.

To direct children with autism towards society, social skills development necessary for everyone to live socially must be brought into play, as the skills are key factors in determining whether or not a person will be socially accepted⁶. Basic social skills include conversation,

² Umaporn Trangkasombat, *The Guideline on Parenting a Child with Autism* (Bangkok: Family Research and Development Center, 2022). (in Thai)

³ Phuttita, *A Guide to Moving with a Child with Autism* (Bangkok: Happy Family, 2007). (in Thai)

⁴ Debbie Riall, *The Autism Resource Manual: Practical Strategies for Teachers and other Education Professionals* (Oxon: Routledge, 2022).

⁵ Ruamsak Jiamsak, "The Guideline on Music Therapy Activities for Children with Special Needs through Learning Management Activities of Music Education for Children," *Journal of Humanities and Social Sciences, Phranakorn Si Ayutthaya Rajabhat University* 8, no. 1 (January-June 2020): 85-112. (in Thai)

⁶ Kullaya Kosuwan and Yuwadee Wiriyangkul, *It's Not Difficult to Teach Autistic Children If You Understand Them* (Bangkok: Nation Books, 2019). (in Thai)

association, non-verbal communication, simple social behavior, and play⁷. These social skills are vital to social acceptance and social competence—those who are well equipped with these skills will deal with conflicts better than those who are not⁸. Inevitably, people with special needs who lack a wide range of skills, such as academic skills, career skills, and emotional skills, will have to compensate such deficiency with social skills. This kind of compensation is advantageous because, for example, a person who lacks learning ability but possesses social skills can at least do any communication or negotiation-related jobs, compared to those who do not possess them at all. For all these reasons, it is advisable that teachers direct their children with special needs towards appropriate learning environment and equip them with social skills so that they will be accepted and thus have reciprocal friendships; this also includes adults with special needs who too will be accepted by their peers⁹.

There are a plenty of treatments to help a child with autism. Behavior therapy, chemical therapy, psychotherapy, brain stimulation, neuromuscular stimulation, and language and communication enhancement are all treatments for the disorder. In addition to the above-mentioned treatments, autism can also be treated using training, music therapy, art therapy, hippotherapy, hydrotherapy, activity therapy, meditation therapy, etc¹⁰. Specifically, music therapy is one of the effective treatments that helps develop speech and language development and comprehension in children with autism, both of which are directly related to their social interactions. It is found that autistic children like music, despite inexperience in playing musical instruments and singing, and that they can perform well in at least one music activity—playing tambourine rhythmically, playing drum along with the given beat, singing or, even better, playing more difficult musical instruments like xylophone, piano, and drum set. Apparently, it suffices to say music per se is endless learning. It involves not only mastering musical instruments but also instilling a love of music in children, teaching them to freestyle or dance in rhythm, encouraging them to participate in music activities, and using musical instruments for improving children's social and communicative behaviors, especially in children with autism. There are a variety of musical

⁷ James K. Luiselli et al., eds., *Effective Practices for Children with Autism: Educational and Behavior Support Interventions that Work* (New York: Oxford University Press, 2008).

⁸ Helen McGrath and Shona Francey, *Friendly Kids, Friendly Classrooms: Teaching Social Skills and Confidence in the Classroom* (South Melbourne: Longman Cheshire, 1991).

⁹ Kullaya Kosuwan and Yuwadee Wiriyangkul, *It's Not Difficult to Teach Autistic Children If You Understand Them* (Bangkok: Nation Books, 2019). (in Thai)

¹⁰ Pensuda Jinokan, "The Study Social Behavior of Children with Autism from Use of Music Therapy," *Journal of Research and Development in Special Education* 7, no. 1 (January-June 2018): 22-41. (in Thai)

instruments, each of which suits different types of children with autism. Two types of musical instruments worth mentioning are indefinite pitch instruments, such as drum and tambourine, and definite pitch instruments, such as piano, guitar, xylophone, and fiddle. Musical instruments are attractive in themselves and enable children to stay focused as well as attentive. When children hear music, their cognition starts and the nervous system works, making body movements or, more precisely, collaboration between eye and hand, right and left hands, and left and right legs when they join in music activities possible. Also, music can help children practice their patience by, at intermission, making themselves wait for a short while. If a child can join in a music activity, exposing him/herself to the music for more than one minute, the patience practice is considered successful—they are rendered somewhat patient. However, children with special needs all fail, especially when they are compared to normal children. Music activities are, therefore, a real booster that helps instill in confidence in children and particularly helps children with autism effectively consolidate their listening skills. Having them enjoy fast-tempo songs and dance along to the music with peers is one of perfect examples, as it can urge them to interact with others. Another good example is having them enjoy slow-tempo songs that will put them at ease and improve their focus. Because of these, music is an alternative to treatment for autism¹¹.

Further, music-mediated activities also motivate socially-rejected children with autism to interact with their teachers together with their peers. Activities may begin with using simple non-verbal expressions and getting them to give feedback on the activities. This is a starting point for more complex music activities that will later better their social interaction, engagement, role acceptance, and role performance during the activities¹². This is supported by Grealish's¹³ study on music therapy that revealed that the use of music for treating autism in children really worked. It was very effective in a way that it improved their social interaction, engagement, role acceptance, and role performance in different kinds of music activities. Another study found similar data, showing that six areas of social behaviors in children with autism changed after receiving music therapy, which confirmed the proposed hypothesis¹⁴. Further, Vaouli and

¹¹ Pang Chinnapong, "Potential Impact of Music on a Child with Autism," accessed August 1, 2020. <https://mgonline.com/qol/detail/9570000067415>. (in Thai)

¹² Waranit Phichityotsawat, "The Effects of Music Therapy Activities on the Development of Communication and Social Interactions in Children with Autism" (Master's thesis, University of the Thai Chamber of Commerce, 2012). (in Thai)

¹³ Laurie Grealish, "The Skills of Coach are an Essential Element in Clinical Learning," *Journal of Nursing Education* 39, no. 5 (May 2000): 231-233.

¹⁴ Pensuda Jinokan, "The Study Social Behavior of Children with Autism from Use of Music Therapy," *Journal of Research and Development in Special Education* 7, no. 1 (January-June 2018): 22-41. (in Thai)

Archontopoulou's (2020) study on music and social skills for young children with autism showed revealed that children with Autism Spectrum Disorder (ASD) seemed to be positive on the use of music as a tool to promote social development and communication.¹⁵

It is, therefore, increasingly evident that music activities, as discussed earlier, can be adopted as treatment for behavioral problems in children with autism, thanks to their potentials for physical and mental development. They allow children to join in, familiarize themselves with active engagement, and practice, bringing about behavioral change, confidence, adaptability, courage, and improvement of some neurological impairments. Because of these, using music activities for improving social skills in children with autism is worth examining by advisory teachers. This research was conducted in teachers' aspects about the music activities would serve as a more effective approach for improving all areas of development especially the social interaction in children with autism, changing their patterns of undesirable behaviors and supporting their quality learning.

Research Objectives

To investigate advisory teachers' aspects in terms of autism children's social interactions after using music activities.

Research Methodology

Purposive sampling was used in the study. The participants in the study consisted of four advisory teachers who had been involved with the students using the music activities¹⁶, supervising the students for at least 2 years, and had experience taking care of children with autism for more than 5 years. The study was conducted at the Autistic Thai Foundation (ATF), spanning from 20 October 2021 to 8 December 2021.

It should be noted that this study was conducted under COVID-19 preventive measures. In consultation with the Thai Autistic Foundation, the organizers adhered to COVID-19 safety measures. This included ensuring that all participants had received at least two doses of the vaccine prior to the event and wearing face masks throughout the implementation of the activities.

This research was approved by the Human Research Ethics Committee of Srinakharinwirot University with IRB number SWUEC-176-2564E.

¹⁵ Anna Archontopoulou and Potheini Vaiouli, "Music and Social Skills for Young Children with Autism: A Survey of Early Childhood Educators," *International Journal of Educational Research Review* 5, no. 3 (2020): 190-207.

¹⁶ Nuttika Soontorntanaphol, "The Development of Music Activities for Improving Social Skills in Children with Autism," *Journal of Fine and Applied Arts, Chulalongkorn University* 9, no. 2 (July-December 2022): 40-58. (in Thai)

Research Instrument

Collecting data by using in-depth interviews with semi-structure question in terms of social interaction aspect. At the beginning, researcher informed the objectives of carrying out the in-depth interviews and asked to collect every piece of information after the activities. Once the activities were all completed, the teachers had in-depth interviews with the researcher to provide further insights and evaluate the outcomes of the study.

Analysis

Qualitative analysis was conducted using semi-structured in-depth interviews.

Results

The qualitative data from interviews with the four advisory teachers were presented below:

The first teacher reported that after the activities, students demonstrated an increased in engaging with friends. Previously, students had refused to play with others, but now they actively sought out their friends without needing prompting. The teacher also noted that students who had no interest in music would listen briefly to the music, and would not disturb others. The student's awareness of their own preferences and their awareness of their friends' activities were considered acceptable.

Additionally, students showed a greater interest in sounds and musical instruments. They actively joined their friends in activities and displayed enthusiasm in playing. It was noteworthy that students who previously ignored musical instruments now independently chose and used them, indicating an improvement. Furthermore, the students like to imitate the sounds they hear, which shows an interest in music.



Figure 1 Students showed a greater interest in sounds and musical instruments.

Source: by author

The second teacher reported that the students used to engage in activities individually without much regard for each other. However, after the activities, they demonstrated the ability to work together. The teacher provided an example of how the change manifested in the children. Previously, they would only help each other when required to complete a joint task, such as making a clay pot, and then separate afterward. However, they now display teamwork and continue to collaborate when one of them noticed their friends engaged in an activity.

Additionally, the students exhibited self-esteem and shared their achievements with others to receive acknowledgment. The teacher observed these behaviors in many students when they received their rewards after participating in the activities. They approached their teachers to share information about the rewards, and would take the rewards home to show their parents.

While waiting for their parents to pick them up, some students are eager to listen to music, so the teacher allowed students to listen to music on YouTube. Although some student disliked the chosen music sat quietly with their head down, they are still able to be in the presence of it playing.

The third teacher reported that the students previously showed little interest in playing with friends and would frequently walk back and forth without engaging with others. However, after the activities, some student displayed an increase of interest in socializing and actively invited friends to play by using the phrase, “*Wanna play?*” Similarly, some students who were previously introverted and fidgety now spend more time with friends after participating in the activities.



Figure 2 Students participated in the music activities.

Source: by author

The teacher also shared an observation regarding a student's eating behavior. When asked to eat, the student would refuse and remain still. However, when the teacher let the student sang before meals, it occasionally helped he/she stimulate his/her appetite.

The teacher also mentioned another student who had a slow progress, possibly due to his/her lack of interest in music. Some students disliked both music and songs, but still sit to listen to music while not disturbing others. Nevertheless, the teacher considered this behavior somewhat acceptable, as some students demonstrated self-awareness of their preferences and an understanding of their friends' activities.

Both the first and fourth teachers mentioned significant improvements in students' behavior. Previously, some of them would stay within their comfort zone and remain quiet in the presence of strangers. When discontented, they would make noise and exhibit aggressive behavior such as breaking their friends' fingers or pulling them before isolating themselves. However, after participating in the activities, some student engaged more with friends and displayed reduced intimidating behavior.



Figure 3 Students engaged more with friends.

Source: by author

Both the first and third teachers, the music activities proved to be effective in stimulating the interest of children with autism and increasing their focus and engagement with music. When the teachers were preparing to play music, the children would proactively invite their friends to join them without needing any instructions. The students, who displayed a keen interest in music, would even select songs on the tablet device. On the other hand, some student showed a more indifferent response to the music, occasionally pushing away their friends and

expressing distress through sobbing when they were discontented. However, it is important to note that improving this pattern of behavior may require additional time and intervention.



Figure 4 Students invited their friends to join.

Source: by author

Thematic Analysis of Qualitative Data from Advisory Teachers' Interviews on Music Activities for Children with Autism. From this study, advisory teachers illustrated four aspects of social interactions; social engagement, interest in music, self-esteem and acknowledgment, and varied responses to music.

Theme 1: Social Engagement

First Teacher:

Increased Social Interaction: Students had demonstrated an increase in engaging with friends after music activities.

Initiative in Socializing: Previously reluctant to play with others, students now actively sought out friends without prompting.

Awareness and Acceptance: Students exhibited acceptable awareness of their own preferences and their friends' activities.

Improvement in Socializing: Students displayed an increased interest in socializing and actively invited friends to play.

Transformation of Introverted Students: Previously introverted students spent more time with friends post-activities.

Fourth Teacher:

Significant Behavioral Improvements: Students engaged more with friends, displaying reduced intimidating behavior.

Theme 2: Interest in Music

First Teacher:

Increased Interest: Students showed a greater interest in sounds and musical instruments.

Independent Engagement: Previously ignored musical instruments were independently chosen and used, indicating improvement.

Imitation of Sounds: Students exhibited enthusiasm by imitating sounds, demonstrating a genuine interest in music.

Second Teacher:

Teamwork and collaboration: Activities fostered teamwork with students collaborating more and helping each other.

Interest Despite Dislike: Some students, despite disliking chosen music, sat quietly, displaying tolerance in the presence of music.

Third Teacher:

Interest in socializing and music: An increase in socializing was accompanied by newfound interest in music.

Fourth Teacher:

Behavioral Changes: Music activities contributed to significant improvements in students' behavior.

Theme 3: Self-Esteem and Acknowledgment

Second Teacher:

Demonstrated Self-Esteem: Students shared achievements.

Seeking acknowledgment after receiving rewards.

Theme 4: Varied Responses to Music

Second Teacher:

Mixed Responses: While some students eagerly listened to music, others displayed a more indifferent response.

First and Third Teachers:

Effectiveness of Music Activities: Proving effective in stimulating interest and increasing focus and engagement.

Conclusion

The investigate advisory teachers' aspects in terms of autism children' social interactions after using music activities. That is to say, they now have emotional balance, calmness, concentration, and more positive attitudes. That has contributed to improvement of undesirable characteristics as well as psychotherapy in terms of emotional evaluation, enhancement of positive emotions, self-control, and problem-solving¹⁷. Additionally, music evoked their reactions expressed by moving their bodies, jumping, playing musical instruments rhythmically, prancing, and singing along to music. The rhythm of music also encouraged them to express different emotions, such as excitedness, and amusement. Moreover, fast-tempo music rendered them joyful and cheerful, while slow-tempo music turned them relaxed and focused. Likewise, group music activities, such as singing in a choir and playing musical instruments with friends of the same age, played a part in their improvement, as they pushed the children to learn to be leaders or followers, work in teams, feel more confident, and familiarize themselves with team activities. Because of these, they would no longer feel lonely¹⁸. This was done according to the concept proposed by Ratanapairoj and Sanlung¹⁹, highlighting that tactile stimulation comprising social touch, poking, massage, carry, and hug can be one of the many ways to show love, warmth, and caring.

After their participation in the music activities, they could interact with others more effectively, express themselves to others, approach their friends, feel free to join them for play, and step out of their comfort zones. Besides, because play and activities are indispensable to children, music activities are a not bad medium to connect them and help them build good relationships. Moreover, music also puts children with weak social skills at ease, allowing them to work with teachers and friends and removing their senses of being different²⁰. Needless to say, there's a lot to be said for music activities—they allow children to socialize with people, intermingle together, share things, help each other in a friendly manner, improve teamworking skills, and learn from lessons, such as fighting over musical instruments and some quarrels.

¹⁷ Nuttika Soontorntanaphol, "The Development of Music Activities for Improving Social Skills in Children with Autism," *Journal of Fine and Applied Arts, Chulalongkorn University* 9, no. 2 (July-December 2022): 40-58. (in Thai)

¹⁸ Pang Chinnapong, "Potential Impact of Music on a Child with Autism," accessed August 1, 2020. <https://mgronline.com/qol/detail/9570000067415>. (in Thai)

¹⁹ Phanida Ratanapairoj and Siripran Sanlung, *Effects of Creativity Play towards Social Interaction of Early Childhood Autism*, *Rajanukul Institute* (Bangkok: Rajanukul Institute, Department of Mental Health, Ministry of Public Health, 2011). (in Thai)

²⁰ Ruamsak Jiemsak, "The Guideline on Music Therapy Activities for Children with Special Needs through Learning Management Activities of Music Education for Children," *Journal of Humanities and Social Sciences, Phranakhon Si Ayutthaya Rajabhat University* 8, no. 1 (January-June 2020): 85-112. (in Thai)

According to the result, the advisory teachers highlight positive outcomes in four aspects of social interaction; social engagement, interest in music, self-esteem and acknowledgment, and varied responses to music for children with autism participating in music activities. While some students demonstrated immediate positive responses, others exhibited mixed reactions, emphasizing the need for ongoing observation and tailored interventions. Overall, the findings underscore the valuable impact of music activities on enhancing the lives of students with autism.

Discussion

The results parallel the study of Phichityotsawat²¹ that investigated the effects of music therapy activities on communication development and social interactions in children with autism. Her study found that communication development and social interactions in children with autism after the music therapy activities were distinctly improved, compared to those before the therapy. It should be noted that the majority of the children demonstrated their improvement of communication and social interactions. The results of this study are also consistent with those of Jinokan²². Her study focusing on social behavior changes in children with autism after receiving music therapy showed that music therapy affected six areas of social behaviors in children with autism. The comparison of means clearly represented changes in their behaviors after receiving the therapy, which confirmed the hypothesis. Likewise, Lagasse's (2014) study on effects of a music therapy group (MTG) intervention on enhancing social skills in children with autism also found that there were significant between-group differences for joint attention with peers and eye gaze towards persons, with participants in the MTG demonstrating greater gains.²³

Recommendations

1. The results of music activities on social interaction should be explored in children with various levels of autism.
2. A focal point should be sought for holding attractions for children with autism in order to help them pay attention and modify their behaviors.

²¹ Waranit Phichityotsawat, "The Effects of Music Therapy Activities on the Development of Communication and Social Interactions in Children with Autism" (Master's thesis, University of the Thai Chamber of Commerce, 2012). (in Thai)

²² Pensuda Jinokan, "The Study Social Behavior of Children with Autism from Use of Music Therapy," *Journal of Research and Development in Special Education* 7, no. 1 (January-June 2018): 22-41. (in Thai)

²³ A. Blythe LaGasse, "Effects of a Music Therapy Group Intervention on Enhancing Social Skills in Children with Autism," *Journal of Music Therapy* 51, no. 3 (Fall 2014): 251-275.

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