

EVALUATION ON MUSICAL INTERVENTION OF DAILY ACTIVITY AND COMMUNICATION SKILL AMONG THYE AUTISM CHILDREN WITH SPECIAL REFERENCE TO KOLKATA CITY, WEST BENGAL

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Abstract:

The well-established and risk-free method of employing music to assist people with a wide range of cognitive impairments and emotional difficulties in improving their capacity to operate in day-to-day activities is known as music intervention therapy for autistic children. Music helps the special needs children with things like appropriate behavior, social interaction, muscle relaxation, and serving as a diversion from pain, discomfort, and misery. Music therapy can also be used to achieve educational objectives. An approach to music and dance education that allows each person the opportunity to express themselves to the best of their abilities can provide effective results. In this article, evaluation on musical intervention of daily activity and communication skill among thye autism children with special reference to Kolkata City, West Bengal has been discussed.

Keywords: Musical, Intervention, Daily, Activity, Communication, Skill

INTRODUCTION:

Music therapy is now becoming very widespread in special education [1-2]. The important fact here is that a child's special education curriculum is not replaced by music therapy, but it is complemented by it [3-6]. The study examined the effects of music intervention on autistic children in their early years and how it might improve social communication skills and strengthen parent-child bonds through efficient communication and day-to-day activities [7-10]. The objectives of the research were to study the level of improvement daily activity of autism children after using of music intervention and to study the level of improvement in communication of autism children after using of music intervention.

The condition known as autism spectrum disorder (ASD) has an impact on a child's growth, development, and nervous system. It frequently manifests in the first three years of a child's life. Some kids with ASD appear to be in their own universe. They have minimal social awareness and show no interest in other kids.

RESEARCH METHODOLOGY:

Hypothesis:

1. There would be change of daily activity of autism children after using of musical intervention.
2. There would be change of communication skill of autism children after using of musical intervention.

Variables:

Independent Variable:

Demographic factor.

ASD child Behaviour and social interaction.

Musical interaction.

Dependent Variable:

Daily activity living (ADL)

Communication skill

Sampling:

Sampling is the process of choosing a small group of subjects from the target population in order to estimate the characteristics of the entire population. It is how candidates are chosen from the target population for the purpose of the research. In this study, a purposeful sampling strategy was applied. Purposive sampling is a non-probability sampling technique in which candidates chosen based on the investigator's personal assessment are taken into account. To obtain a sample that is considered representative of the intended population is the primary goal of purposive sampling.

There were sixty initial samples in this investigation. Ultimately, 20 children with special needs, including those with autism disorder and their parents and caregivers, comprised the study's subjects (14 boys and 6 girls). Every participant was selected from the West Bengal based Music Therapy Centre, Kolkata. The individuals receiving treatment ranged in age from 5 to 10 years old. There were both male and female individuals in the sample that received therapy. All the information about the study and the procedures that would be followed was provided to the participants. They, too, were told about the interview. Every child had a pre-diagnosis and was open to participating in music therapy sessions.

- Age from 5 to 10
- Both sexes
- Child already diagnosed with Thye Autism Disorder
- Subjects with minimum six sessions of music therapy

Data Collection:

The researcher carried out the study by obtaining consent to gather data from the individuals and locations listed above. Following consent, the researcher observed the subjects during therapy sessions, spoke with the participants' parents and caregivers, and recorded the subjects' progress toward the goals that had been suggested for each of them.

Procedure:

This study looked at the behavioural and emotional issues that kids with special needs faced and investigated if music therapy could be a useful tool for addressing those issues. In the facility where the participants received individual music therapy, the researcher was supporting the continuing music therapy practice. Every subject completed a case study on their own, and conclusions were drawn from the findings.

By allowing the kids to explore their interests in music (among various instruments and vocals), music was providing a means for the kids to excite and express their emotions and positive behavior during the treatment sessions. This case involved the use of passive music therapy, in which the participants were allowed to choose the musical genre they were most interested in, and the therapist watched what caused them to act and feel in certain ways. Then, in accordance with the intended outcomes, the music mode was applied.

When the participants showed up for music therapy, they already had a diagnosis. The study's purpose and methodology were explained to the participants and their parents, who were also informed that the individuals' identities would be kept private. The parents of the participants, who often interacted with the exceptional children, were individually interviewed prior to the commencement of the music therapy. Open-ended, semi-structured questions about the participants' emotional and behavioural issues made up the interview. After that, the subjects received multiple music therapy sessions, during which time the researcher carefully observed and recorded the goals and objectives to be achieved through the therapy. Each research participant had a private session of music therapy. Every session lasted between thirty and forty-five minutes, with a week's break in between. Additionally,

the one-week period was occasionally prolonged to observe whether the intervention's effects reverted. Each client received anywhere from six to twenty sessions in order for the therapy to result in the noticeable change that was seen. After individual therapy ended, the parents and caregivers were re-interviewed using the same semi-structured interview questions to get their input on the outcomes of music therapy. This encouraged them to share candidly about their experiences. On the semi-structured questionnaire, they were free to respond and express themselves as freely as possible without regard to the researcher's assumptions. Results were derived from clinical notes taken throughout therapy through observation and interview replies. Every subject completed a case study on their own, and conclusions were drawn from the findings.

Music therapy process:

It was a setting for personalized music therapy. The initial music therapy session involved exposing the participant to a variety of instruments in the treatment room and allowing them to experiment to determine which ones most interested them. In order to determine which instrument the participant is interested in, the therapist continues to play one before moving on to the next. To provide ongoing stimulation, the therapist also continues to do vocal improvisations in the style of songs and rhymes.

In the following few sessions (three to five), the participant's interests were identified and a rapport was built. The secret was to first take their lead and find the musical genre they enjoy, and then to let them follow the therapist's instructions in that same genre. During the therapy session, the client was approached in a non-directive and child-centered manner. The child is not coerced into doing anything during the session, nor is anything pushed upon them. In the least restrictive setting created by the therapist, the patient is free to investigate and react to noises, music, and musical instruments in a way that seems right for them. The customer is given a variety of instruments to play, listen to, or experiment with. These instruments come in a variety of shapes, colors, tones, and sounds. Exploration typically results in impromptu musical exchanges and therapeutic improvisation. It is offered to the youngster to listen to a variety of music—live, recorded, or both. The music can range from mellow, calming tunes to lively, quick, and loud tunes.

Each participant received a different number of sessions overall based on their behavioural and emotional needs, which were monitored during the sessions. Over a period of two to six months, this amount fluctuated between six and twenty sessions. The session's activities included listening to, singing, and replicating songs as well as instrumental plays. There were also improvisations, songs using the participants' names, good-bye songs, and welcome and farewell songs.

Research Tools:

1. ADL assessment (Bill Nason, MS, LLP Carrie Aldrich, BSBA)
2. Questionnaires: (a) Pre-study Interview Questions (b) Post-study Interview Questions
3. Case Studies: The case studies has been included the following parameters:
 - Introduction to the client
 - Behavioural and emotional problems identified
 - Observations during the music therapy
 - Musical behavior
 - Level of the Participation in the improvisation
 - Changes observed
 - Comments of parents and/or caregivers
 - Conclusion

DATA ANALYSIS:

The data analysis and theme analysis were conducted using the case study database. To determine the meaning and examine the information from the interview replies and clinical notes, thematic analysis was employed. Finding patterns or themes in qualitative data is known as thematic analysis.

Prior to conducting any data analysis, the raw data—which consisted of interview transcripts and clinical notes—was prepared. After carefully reading the text, categories and themes were developed. The categories were then continuously revised, and their context was explained in relation to the study objectives in order to produce systematic results.

FINDINGS, DISCUSSION AND RESULTS:

Finding 1:

The researcher dragged out the following themes and sub-themes from the case studies and draw results accordingly:

1. Behavioural problems

Sub themes:

- A. Social behaviour
- B. Communication and speech
- C. Attention
- D. Participation and performance
- E. Hyperactivity

2. Emotional problems

Sub themes:

- A. Low confidence
- B. Aggression
- C. Distress
- D. Shyness
- E. Emotional expression
- F. Discomfort

Finding 2:

Here are the sub-themes of behavioral problems identified and the impact of music therapy on them.

Behavioral problems of Children with special needs:

The other major subject that emerged from the thematic analysis was behavioural issues related to children with special needs. As can be observed, this was one of the primary themes that surfaced in the study. The case studies demonstrate how music therapy was able to positively impact a large number of behavioural issues. It made the subject's behavior more controllable and improved it for the remainder of the day. The following is a list of the sub-themes examined in the behavioural problems:

A. *Social behavior*

It facilitated client contact, as seen in the music therapy sessions. Individuals with special needs like being by themselves. According to the majority of parents surveyed, the subjects' low social skills prevented their child from forming healthy interactions at the start of therapy. A few of them mentioned that their child desired friends but was unable to make any due to a variety of causes relating to their child's issues. Following their pain as a result of this escalation, they lost hope and gave up trying. These case studies demonstrate how the therapist's attention to the subject-therapist interaction helped the patients develop a fresh sense of hope and improved social skills. Some of them even used to ask and remind their parents for the following session as they began to appreciate the company. According to a parent who also reported this, their child is more self-conscious and aware of others when they participate in musical activities. He made an effort to continue talking instead of avoiding it. When speaking with someone, several of the case studies' clients made poor eye contact, which was shown to alter to increased eye contact and make the client feel more at ease. The individuals benefited greatly in the area of social skills via music therapy.

B. *Communication and speech*

Communication was the second typical behavioral issue in most of the instances involved. It was observed that a client's communication was significantly impacted by music therapy. Through instruments and songs, it facilitated both verbal and nonverbal communication between the patients and the therapist. For example, when the therapist sang a song with terms the subject knew or included their name, the participants' facial expressions would alter. A few participants even demonstrated the behavior of mimicking the therapist's singing and carrying on with it. The subject expressed more of their feelings, likes, where the difficulty is, and many other communication-related concerns as a result of the therapist's numerous additional communication-encouraging efforts. A few of the participants experienced difficulties with speech, specifically related to their vocal tract. Through music therapy, these issues were addressed, and the subjects were able to speak in short words, complete sentences, recite songs, and do other activities.

C. *Attention*

There were issues because the subject had a limited attention span. The impact of music therapy was also seen in this area. The subjects' attention was drawn to music, which enabled them to focus on one modality at a time, according to the researcher. Compared to studying and other less stimulating hobbies, listening to music requires concentration because of its many features that cause the mind to operate in multiple directions at once. However, because it is happy, paying attention to it is easier.

It was found that the clients liked music and were more involved in it. Their attention was always drawn to any sound-related assignment that was placed in front of them. Even so, their answers to the musical job changed with time, becoming more near the conclusion of therapy and less at the beginning. Their incredibly concentrated and joyful reactions right from the beginning of their music therapy sessions with the therapist demonstrated how their interest in the form of music therapy worked for them. It's safe to say that music did a great job of drawing their attention. They were devoted to music because they liked it so much. One may argue that it's a fantastic method of education for them. Subjects receiving music therapy started paying closer attention to the activities than they had before. They become more appreciative of music.

According to a parent, their child now stops and listens to music when they hear it, regardless of the source.

D. Participation and performance

We all know that when we enjoy an activity or find pleasure and satisfaction in it, we want to repeat the experience or do the activity again. One activity or experience that feels good, makes people happy, and is enjoyable is music. This idea was applied in this case to the client's participation in the activities the therapist used to introduce the subject. Participant enjoyment of the activities led to a desire for more. Another contributing aspect in this instance was that the students' confidence increased, and they were driven to participate more when they performed the exercise and received encouragement and appreciation for it. The parents also stated that music helped them to decompress and showed signs of stress. Their degree of participation in therapy has increased due to various variables, including encouragement, feeling relieved from their earlier distress, and engaging in individualized activities.

E. Hyperactivity

Many of the special needs kids in treatment, particularly the ones with ADHD, struggled with hyperactivity. Even the therapist was quite concerned about how the therapy would proceed if the youngster refused to sit down. However, as the therapy went on and the individuals' interest grew, it was noticed that they began to remain with one instrument and sit in one spot for extended periods of time.

Thus, we can conclude that music therapy benefits special needs children's behavioral needs and aids in their management.

Finding 3:

The following findings are presented to illustrate how music therapy affects the emotional requirements of children with special needs on a subtheme level.

Emotional problems of children with special needs

Another prominent theme that emerged from the findings was that the primary issue facing children with special needs was their emotional distress. This was another area where music therapy produced changes. Since our behavior affects our emotions and vice versa, this one is likewise tied to the prior one. First off, when the behavior altered, so did the negative feelings that caused the abnormal behavior to lessen. Due to the fact that music is linked to our emotions, it was noted in the case studies that the individuals went through a range of emotions in addition to the feelings they first arrived. There were some significant effects of music therapy on the client's emotions. Below is a list of the sub-themes that were examined under emotional problems:

A. *Low confidence and motivation*

According to the research, music therapy fosters more self-confidence in youngsters with exceptional needs. For the majority of the respondents, it was important to participate in and communicate during many of the music therapy sessions. There was evidence to suggest that the subjects' confidence had increased. The individuals were inspired to engage in more activities when the therapist asked them to sing or participate in instrumental and improvisational activities and encouraged them to do so. The therapist's praise for the exercises, the parents' participation at home, and their own initiative all helped to boost their confidence. Due to the fact that each session was individualized, the therapy's focus was on a certain topic at a given moment, which helped the patients feel specific and significant. Enhancing social skills was another aspect that increased the subject's self-confidence.

B. *Aggression*

Prior to receiving music therapy, a number of parents who were interviewed expressed dissatisfaction over their child's aggressive conduct and episodes of tantrums. Following counseling, their opinions on the same were drastically different. They used music as a calming technique to soothe their child. Because the vocals and instruments provided a wide emotional expressive range, the subjects felt more at ease during the sessions, even if the therapy only

began with a lot of tantrums from the subjects. Subsequently, the individual began to like and appreciate the music. The parents claimed that the effect persisted even after the therapy.

C. *Distress*

Distress emerged as one of the common emotional issues among the subjects (children with special needs) in the researcher's findings. This feeling was observed to reverse both during and after the music therapy sessions. The most often expressed feeling during therapy sessions was happiness. Nearly all of the parents mentioned it, and the researcher saw it in nearly every participant. The development of rapport served as the cutoff point at which the participants were deemed content in general. After that, they began to participate in the events. "The child became happy and started laughing and smiling," according to one of the parents. He was happy once he got to know the music therapist and the surroundings. When the subjects were introduced to the music therapy method, they were given numerous chances to express their feelings. Many demonstrated various coping mechanisms for suffering. Parents revealed that because the subject's mood persisted, they were able to control many of his behaviours at home. Another parent said something similar, letting them know that their child had become content.

D. *Shyness*

One such emotional issue that was seen was the shyness that many of the patients experienced in the early sessions. The parents admitted to the interviewer that their child had been bashful when the therapy first started. The researcher also noticed that many participants were unable to participate since it took them some time to create rapport and express their feelings, degree of happiness, and confidence. They felt awkward approaching new individuals in unfamiliar circumstances since they were aware of their differences and how they differed from others. This was another factor. The degree of shyness reduced as they began to enjoy the music therapy sessions. Having more confidence also helped with shyness. With each week that went by, they grew more at ease with the therapist and the sessions. Parents said that their responses in social situations have also changed since social skills have improved.

E. Emotional Expression

When therapy first began, the majority of special children had emotional expression issues. This meant that they couldn't communicate their true feelings to those closest to them, which led to anger and frustration. The respondents' ability to articulate their feelings was a major area of attention for the therapist, who encouraged them to do so. Screaming in rage, playing an instrument quickly, or playing high-pitched instruments were some of the ways that the respondents expressed their anger. Other subjects grinned in response to the musical mode. Music evolved into a suitable substitute for them to convey their ideas.

F. Discomfort

Numerous parents of the participants had complaints regarding their unease in social settings. The soreness was evident even when they arrived for treatment. Parents have indicated that a great number of students have had pain at school as a result of their issues.

As a result, it is evident that while some case study participants had many concerns, others just had one difficulty that was linked to additional behavioral and emotional disorders. Thus, there was data overlap. It requires the stimulation of multiple brain regions, including those linked to audition and motor functions, to react to a musical instrument. In addition to the clinical notes made while watching the subjects in music therapy sessions, the researcher felt that interviewing the parents and/or caregivers who reside with the subject and also play a significant role in the client's life would be the most effective approach to investigating the study's objectives. Thus, the researcher worked with the clientele on a weekly basis while utilizing the same procedure. In addition to observing behavior, this study also records the subject's feelings both during and after therapy; these observations will be covered in the theme section. The interviews yielded a variety of topics, including behavioral issues and emotional issues, along with their subthemes. The impact it had on the client's behavior was also examined. This therapy had a lot of advantages. Answers from semi-structured interviews provided the data.

1. Behavioural problem:

This could be as a result of the client being given a variety of activities to engage in through music and instrument playing. One could conclude that our experiences have a direct impact on our conduct, both overt and covert. A study was conducted by Srinivasan and colleagues. According to a 2013 study that cites the social skills study's findings, "Children with autism have difficulties with direct social engagement; hence, musical activities of the socially embedded group provide extraordinary opportunities for engaging in predictable and comfortable interactions with social partners." A different study by Chou finds that music therapy has a more lasting effect on autistic children, as evidenced by the children's continued use of the skills they learned during therapy even after the therapy was stopped. Their social and communication abilities persisted. Those abilities, which they had learned even in the absence of musical stimuli, were put to use.

Since communication is considered to be one of the most fundamental human needs, along with many other behavioural skills like social behavior, relationships, speech, and interaction, it can also be assumed that music therapy gave the study's subjects a private space for individual communication during the introduction sessions. Even during the rapport-building phase, communication played a crucial role that could not be overlooked. Clients receiving music therapy now have a space to explore their interests and communicate in line with those interests. These case studies demonstrate that individuals' freedom to act however they pleased was likewise extended to them. The respondents improved in a number of behavioral domains, including connection building, communication skills, increased engagement and attention, and decreased hyperactivity. The individuals began to exhibit conduct that was different from their prior patterns, according to parents and caregivers. Their social contact increased, and they began to communicate more and form friendships. Further investigation and analysis of the study revealed that the participants also developed the capacity to begin relating to other people.

They were now better able to concentrate on events (any action carried out during therapy), individuals (the therapist), and objects (instruments). They identified with the therapist and all that they were doing. They seemed interested in hearing their names sung in the song,

indicating that they could identify with them. The creation of a focus point that the subject and the therapist could agree upon was a crucial component that assisted subjects in learning a variety of behavioural skills. Over the course of the study, each and every individual experienced a series of little alterations. This finding can be explained by the variety of instruments used and the subject's exposure to a variety of musical genres, such as songs, rhymes, instrument playing, imitation, etc., which allow the subject to experience the different perspectives and structures of music and its creation. The therapist's goal was to address the clients' problematic behaviors and implement adjustments while playing the music that each individual had selected. Thus, very particular aspects of music were used in the treatment. One by one, these distinctive features of music were examined so that participants could adjust to them in accordance with their aptitudes and achieve the intended outcome. This helped them advance their skill development.

2. Emotional problems:

Some of the case study subjects were able to articulate their emotions during therapy, whereas others were unable to do so. Across all subjects in therapy, joy and happiness were the most commonly reported emotions. According to the care workers, it depends on how the patient feels when they come for music therapy. He stated that the music had a significant impact on the subject's emotions as a result of his findings. Music therapy has a positive impact on the subject's development of their perception of both themselves and other people. The study discovered that music has an impact on the subject's sense of self and emotions, which helps to explain how the therapy positively impacts the subject's development.

Consequently, the following describes how and what we might infer based on recent studies aimed at identifying emotional and behavioural issues in children with special needs:

1. The music activates a variety of mental processes, including language, cognition, emotions, and action. When handled, it becomes extremely complicated because all of these are combined into one activity. People with speech or language impairments are given a type of compensation when listening to music. Through this compensatory medium of "music," they are able to communicate their feelings and emotions. It also encourages the development of language. A

highly ordered sequence of vibrations and sounds in time is what makes up music. According to a researcher cited in the literature, music sets expectations before meeting them. It poses a query and provides an answer.

2. Music has an impact on subject accuracy and attention as well. The patient in the therapy benefits from it. The person's attention is diverted while the topic performs tasks like memorization, instrument playing, or singing. Therefore, different aspects of emotions and behaviours such as self-worth, self-emotional expression, and impulse control, being less aggressive, attentiveness, concentration, distress management, motivation, and memorization are strengthened during music therapy sessions.

3. One aspect of music that stimulates higher-order cognitive processes in people is creative expression. Therefore, exceptional children can adapt a variety of cognitive skills by creating music or receiving music therapy in any format.

4. Similar to the emotional and mental reactions, music also profoundly affects the body's physiological reactions. Particularly when they are connected to one another, which is the case most of the time. Our emotions are closely linked to our physiology, and vice versa." The arrangement for releasing tension associated with emotional excitation is explained by music. According to Abeles (1980), it elicits physiological reactions linked to emotional arousal. Our bodies react differently to different beats in music, and this also affects our emotions. Different types of music evoke different feelings and emotions in people; therefore, this, as well as the sound of an instrument, can have a behavioural impact.

5. For kids with particular challenges, music therapy has a variety of benefits. One study cited the relationship between special needs children's behavior in the classroom and music, concluding that special needs children can be accommodated in inclusive classrooms through the use of music.

CONCLUSION:

It is possible to draw the conclusion that music therapy can assist in meeting the diverse behavioural and emotional needs of children with special needs based on the rich data and themes that were extracted from it through observations and interviews. The outcome lends credence to the idea that music therapy is a comprehensive strategy that benefits the whole person. The research's conclusions demonstrate that the parents' and caregivers' opinions and comments provided the researcher with a profound understanding and more data to supplement the observations. It gave the researcher a foundation on which to contemplate.

The findings demonstrated a connection between special needs children's issues and music therapy. Music has a positive impact on these kids' emotional and behavioural issues, improving their confidence, speech, mood, participation, emotional expression, and attention, as well as lowering their levels of aggression, negative behavior, and distress. In conclusion, the topic of this study was highly engaging and thought-provoking, which made the researcher feel fulfilled.

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