

Exploring the Role of Rabindra Sangeet in Enhancing Social and Cognitive Skills in Autistic Children: A Case Study Approach

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Abstract: *Rabindra Sangeet, the musical compositions of Rabindranath Tagore, is deeply rooted in the cultural ethos of Bengal and known for its profound emotional depth and lyrical richness. This study explores the potential of Rabindra Sangeet in enhancing the social and cognitive skills of children diagnosed with Autism Spectrum Disorder (ASD). Through a case study approach involving multiple children from diverse socio-economic backgrounds, this research examines how exposure to and participation in Rabindra Sangeet sessions impact emotional expression, social interaction, verbal communication, and cognitive abilities. Preliminary findings suggest that Rabindra Sangeet's soothing melodies, rhythmic patterns, and emotional narratives create an inclusive environment that fosters improved sensory integration, attention span, and emotional regulation. The study highlights the therapeutic potential of music rooted in cultural familiarity, offering a unique, non-invasive intervention to enhance the developmental outcomes of autistic children.*

Keywords: Rabindra Sangeet, Autism Spectrum Disorder, Social Skills, Cognitive Development, Music Therapy, Emotional Regulation, Case Study

I. INTRODUCTION

Autism Spectrum Disorder (ASD) is a neurodevelopmental condition characterized by challenges in social communication, repetitive behaviors, and sensory sensitivities. Children with ASD often face difficulties in verbal expression, emotional understanding, and social interaction, necessitating innovative and culturally relevant therapeutic approaches to facilitate their cognitive and emotional development.

Rabindra Sangeet, the collection of songs composed by Rabindranath Tagore, is celebrated for its emotive depth and philosophical undertones. With its blend of melody, rhythm, and poetic beauty, Rabindra Sangeet resonates deeply with the emotional and cognitive faculties of listeners. Previous studies have established that music therapy can improve social engagement, sensory processing, and cognitive functioning in children with autism. However, the application of culturally contextual music, such as Rabindra Sangeet, remains underexplored in the domain of autism intervention.

The existing body of research on music therapy in autism largely focuses on Western classical music and structured interventions. While effective, these approaches often overlook the cultural and emotional connect that indigenous music can offer. This study seeks to address this gap by exploring the role of Rabindra Sangeet in enhancing the social and cognitive abilities of autistic children, emphasizing the importance of cultural relevance in therapeutic practices.

II. OBJECTIVES OF THE STUDY

- To evaluate the impact of Rabindra Sangeet on improving the social skills of autistic children.
- To examine the cognitive benefits of Rabindra Sangeet in enhancing attention span, memory, and language skills.
- To assess the emotional and sensory responses of autistic children to Rabindra Sangeet.
- To document individual progress through a case study approach and analyze patterns of improvement.

III. REVIEW OF LITERATURE

Music therapy has been widely acknowledged as an effective intervention for children with ASD. Studies by Gold et al. (2006) and Geretsegger et al. (2014) demonstrate that music therapy improves emotional expression, social interaction, and cognitive functioning in autistic children. Music's repetitive structure, predictability, and multisensory appeal provide a safe and engaging medium for children with ASD to express themselves and develop communication skills. Rabindra Sangeet, composed by Rabindranath Tagore, is a unique synthesis of classical Indian ragas and folk traditions, infused with profound philosophical and emotional themes. According to Bhattacharya (2010), the therapeutic qualities of Rabindra Sangeet lie in its ability to evoke a range of emotions, fostering empathy, emotional regulation, and introspection. The structured rhythm and soothing melodies provide a sensory environment conducive to cognitive engagement and relaxation.

Case study methodologies have proven valuable in capturing the nuances of individual experiences and behavioral changes in children with ASD. Yin (2009) advocates for the use of case studies in understanding complex social phenomena, particularly when contextual factors play a significant role in the intervention. Multiple case study designs allow for cross-case analysis, enabling researchers to identify patterns and draw meaningful conclusions.

IV. RESEARCH METHODOLOGY

4.1 Research Design

This study adopts a qualitative, multiple case study design to investigate the impact of Rabindra Sangeet on autistic children. The research involves observing and analyzing the responses of 5-7 children diagnosed with ASD, participating in a structured 12-week Rabindra Sangeet intervention.

4.2 Sample Selection and Participant Profile

Inclusion Criteria:

- Children diagnosed with ASD (mild to moderate) between the ages of 5 and 12.
- Children with basic verbal and non-verbal communication skills.
- Parents willing to provide informed consent and participate in feedback sessions.

Exclusion Criteria:

- Children with severe cognitive impairments or auditory processing disorders.
- Children with no prior exposure to music-based interventions.

4.3 Intervention Protocol

Duration: 12 weeks (2 sessions per week)

Session Structure:

- Warm-up and sensory integration exercises (5 mins)
- Introduction to Rabindra Sangeet with visual aids and simplified lyrics (10 mins)
- Group singing and rhythmic participation (15 mins)
- Expression through movement and facial gestures (10 mins)
- Cool-down and reflection (5 mins)

4.4 Data Collection Tools

Observation Checklists: To monitor social interaction, attention span, and emotional responses.

- **Parent Interviews:** To gather qualitative feedback on behavioral changes.
- **Pre- and Post-Assessment:** Using tools like the Childhood Autism Rating Scale (CARS) and Social Responsiveness Scale (SRS) to quantify improvements.

V. DISCUSSION AND RESULT

Preliminary analysis of the case studies indicates a significant improvement in social engagement among participants. Children demonstrated increased eye contact, improved turn-taking during group singing, and a heightened ability to

initiate and sustain verbal interaction. The communal aspect of singing Rabindra Sangeet encouraged shared experiences, reducing social isolation and fostering a sense of belonging.

Children who initially exhibited poor eye contact and minimal non-verbal engagement demonstrated notable progress by the sixth week of intervention. The interactive nature of Rabindra Sangeet, where children responded to musical cues through rhythmic clapping and facial expressions, contributed to improved non-verbal communication. For instance, Ananya, a seven-year-old with moderate ASD, began maintaining eye contact for longer durations while participating in group singing sessions.

Participation in structured group singing sessions promoted the concept of turn-taking and shared activities. Children learned to take turns in leading the singing, clapping, and responding to the rhythmic patterns of Rabindra Sangeet. By the ninth week, group cohesion improved as children spontaneously waited for their turns to contribute during sessions. This behavioral change was most evident in Rohan, who, despite his initial reluctance, began actively participating and even encouraging peers to engage in the sessions.

Rabindra Sangeet's lyrical narratives encouraged verbal expression through familiar, repetitive phrases that children found easy to imitate. Children who had previously struggled with initiating conversations or expressing emotions began to use lyrics to communicate their feelings. By the end of the intervention, verbal interaction increased, with children initiating and responding to peer communication more frequently.

Children participating in Rabindra Sangeet sessions exhibited noticeable improvements in cognitive focus and attention span. The structured rhythm and predictable melodic patterns of Rabindra Sangeet facilitated enhanced auditory processing and sustained attention.

The predictable structure of Rabindra Sangeet, characterized by rhythmic repetition and melodic consistency, created a conducive environment for children with ASD to engage their auditory faculties. The familiar patterns allowed them to anticipate changes in melody and rhythm, enhancing pattern recognition and auditory processing skills. By the eighth week, children began demonstrating the ability to identify specific phrases and anticipate subsequent lines, suggesting improved memory retention and cognitive predictability.

Case records revealed instances where children showed improved memory retention by recalling lyrics and melodies after several sessions. Children who initially exhibited limited verbal recall showed remarkable progress in retaining and reproducing lyrics. Tithi, for example, was able to recall and sing complete verses by the tenth week of the intervention, suggesting a positive correlation between repetitive musical exposure and memory enhancement. The rhythmic and melodic elements of Rabindra Sangeet held children's attention for longer durations, leading to increased focus and sustained engagement. Structured activities such as synchronized clapping and facial expressions provided sensory feedback that reinforced cognitive attention. By the twelfth week, children demonstrated longer attention spans and displayed greater ability to stay engaged in tasks beyond the music sessions.

Rabindra Sangeet's emotive quality played a critical role in helping children express their emotions. Children who initially exhibited difficulty in verbalizing their feelings began to demonstrate a broader range of emotional expressions, including joy, curiosity, and empathy.

The emotive depth of Rabindra Sangeet, with its themes of joy, love, and longing, provided a platform for children to identify and express a range of emotions. Songs such as "*Amar Mukti AloyeAloye*" and "*Pagla Hawar Badal Dine*" elicited emotional responses from participants. Children began associating specific songs with moods, expressing feelings of happiness, excitement, and calmness through facial expressions and gestures.

Children who initially displayed heightened anxiety or emotional outbursts demonstrated a significant reduction in these behaviors after participating in Rabindra Sangeet sessions. The soothing melodies and predictable patterns of the music acted as a calming mechanism, providing a sense of security and comfort. For instance, Rohan, who struggled with sensory overload and anxiety, experienced fewer emotional outbursts and displayed a marked reduction in agitation by the seventh week of intervention.

Engaging in group singing activities helped children develop empathy by observing and responding to the emotional expressions of peers. As they participated in shared musical experiences, children exhibited increased emotional attunement to their surroundings and peers, contributing to improved social bonding and group cohesion.

The multisensory experience of Rabindra Sangeet, combining auditory, visual, and kinesthetic inputs, contributed to better sensory integration. Rhythmic clapping, body movements, and facial expressions synchronized with the music helped improve motor coordination, which is often a challenge for children with ASD.

The structured sessions incorporated a combination of auditory and kinesthetic elements, encouraging children to engage multiple sensory modalities simultaneously. Children displayed improved responses to sensory stimuli, showing greater tolerance and reduced sensory defensiveness.

Clapping and synchronized body movements during Rabindra Sangeet sessions improved motor coordination and timing. Children who struggled with fine motor coordination displayed better rhythmic synchronization and control over hand movements by the eighth week of the intervention. Tithi, for example, demonstrated increased precision in her clapping and improved coordination during group singing activities.

Children engaged in movement-based activities that required spatial awareness, such as moving to the rhythm or mimicking facial expressions. These activities not only improved motor control but also enhanced proprioceptive feedback, helping children develop better awareness of their bodies in space.

Case 1: Ananya (Age 7, Moderate ASD)

Ananya exhibited limited verbal communication, poor eye contact, and minimal social engagement. Her initial responses to group activities were hesitant, and she displayed difficulty in maintaining focus.

By the sixth week, Ananya demonstrated improved verbal interaction and began initiating conversations using simple phrases from the songs. Her eye contact improved significantly, and she exhibited greater willingness to participate in group activities. By the twelfth week, Ananya was able to follow instructions, take turns in group singing, and engage in spontaneous verbal exchanges with peers.

Case 2: Rohan (Age 9, Mild ASD)

Rohan displayed heightened sensory sensitivity and emotional withdrawal. He struggled with maintaining focus and exhibited signs of anxiety in social situations. Verbal interaction was limited, and he showed resistance to group settings.

Rabindra Sangeet's structured melodic patterns helped Rohan engage with the sessions. By the eighth week, he displayed reduced anxiety, improved eye contact, and greater tolerance for sensory stimuli. His emotional responses became more nuanced, and he began expressing empathy toward peers. Rohan eventually participated actively in group singing and demonstrated increased social responsiveness.

Case 3: Tithi (Age 8, Moderate ASD)

Tithi exhibited repetitive behaviors, resistance to group activities, and limited verbal communication. She displayed difficulty in sustaining attention and struggled with motor coordination.

Through exposure to Rabindra Sangeet's rhythmic and predictable structure, Tithi's attention span gradually increased. By the tenth week, she showed enhanced verbal recall and reduced repetitive actions. Her motor coordination improved, and she demonstrated better synchronization during group clapping activities. By the twelfth week, Tithi exhibited increased confidence, greater social engagement, and improved responsiveness to group interactions.

VI. CONCLUSION

The findings from this study underscore the potential of Rabindra Sangeet as a culturally rooted, non-invasive therapeutic medium for enhancing the social and cognitive skills of autistic children. Through structured musical interventions, children with ASD demonstrated improvements in social interaction, cognitive focus, emotional regulation, and sensory integration. The case study approach allowed for a nuanced understanding of individual progress and highlighted the effectiveness of culturally familiar music in creating a supportive and engaging therapeutic environment.

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