

Effectiveness of Music Therapy Interventions on Joint Attention in Children Diagnosed with Autism: A Pilot Study

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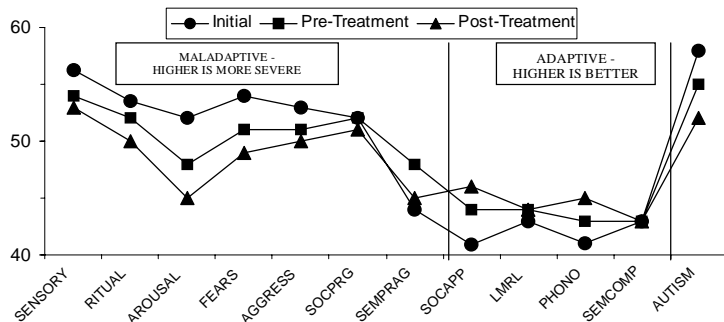
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Abstract

Joint attention, the ability to selectively attend to an object of mutual interest, is a critical skill that develops early in life and consequentially affects future social-cognitive skills, social-emotional skills, and language development. The present study examines the effectiveness of music therapy intervention on development of joint attention behaviors in ASD children both within treatment and outside of treatment. Results indicate that the addition of music therapy intervention to a child's treatment program can have positive outcomes and may be an effective method for increasing joint attention skills in some children with autism.

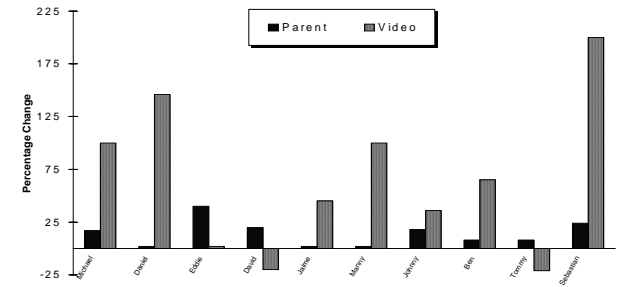
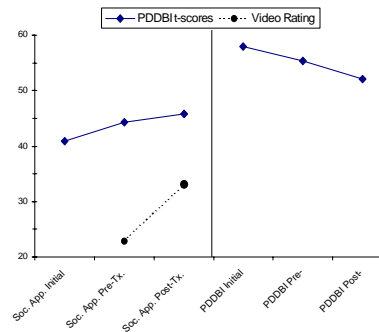
Method

- 14 ASD functionally non-verbal males ages 37 months to 61 months ($M = 50$ months)
- CARS score of 35 or higher (severe autism) ($M = 40.8$)
- 3 Parent Version PDDBI
- Eight 30 minute individual music therapy sessions
- Video tape ratings of Joint Attention behaviors of initial & final MT session



Music Therapy Session Format

Greeting Song — Seated Imitation — Instrument Playing — Gross Motor/Dancing — Goodbye Song



Results

- 70% of children's JA improved: **Parent report:** 8% - 40% ($M = 13.5\%$) **Video rating:** 36% - 200% ($M = 65\%$)
- Group Mean difference on the measured behaviors was 10.4 ($SD = 12.46$; $p = .02$)
- The Mean difference t-scores for the Initial and Post-Treatment was 5.2 ($SD = 6.3$; $p < .01$)
- The Mean difference t-scores for the Pre-Treatment and Post-Treatment was 1.5 ($SD = 5.5$; $p = .35$)
- Small changes in behavior across several areas can "add up" to subjectively noticeable changes noticeable outside of treatment
- Most parents noted improvements in responsivity to social cues and social approach behaviors.
- Positive changes were found in other areas measured on the PDDBI as well.
- Degree of improvement was not related to amount of other therapies being received

Conclusions

The data showed that children with severe forms of autism could benefit from individual music therapy treatment. The addition of music therapy intervention to a child's treatment program can have positive outcomes and may be an effective method for increasing joint attention skills in some children with autism. Participants showed the most improvement in the areas of Visual Social Approach Behaviors (e.g. paying attention to the other person's face and looking at the other to seek feedback or praise), Social Imitative Behaviors (e.g. imitating motor actions and sounds), and Positive Affect (e.g. smiles when praised, showing affection, and smiling in anticipation of teasing, tickling, etc.). Additional behaviors targeted during the videotape ratings included ceasing inappropriate behaviors when warned, using gestures to motion to others, and selecting his own toy to play with and allowing others to play along. Children had numerous opportunities to practice these skills throughout music therapy treatment.