Critical Review:
What is the Impact of Music Therapy on the Joint Attention Skills of Preschoolers with Autism Spectrum Disorder?

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This critical review examined whether music therapy influences the joint attention skills of children aged three to five years old with Autism Spectrum Disorder. Research to date included randomized clinical trials, single subject 'n-of-1' ABC design, and a mixed design involving a series of single subject 'n-of-1' AB design and a single group pre-posttest. Three of the four studies tentatively supported the use of music therapy to increase joint attention skills. One study found mixed results. Research is not conclusive enough to support the use of music therapy for joint attention intervention. Suggestions for future research and clinical implications are discussed.

Introduction

Autism Spectrum Disorder (ASD) is the core disorder of the pervasive developmental disorders, as defined by the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) (as cited in Gold, Wigram, & Elefant, 2006). This neuro-developmental disorder is characterized by impairments in communication, social interaction, and repetitive and restricted patterns of interest (Gold et al., 2006)

attention skills more than play and yielded a strong effect size (***d***=0.79, 95% CI from -0.14 to 1.71). Despite this impressive outcome, results must be interpreted with caution since no inter-rater reliability

improved ***above*** what would have been expected on the trend line. This trend line was unique in the literature and provided additional support to the visual analysis of the data points. The results, however, must be interpreted with caution as other nuisance factors (e.g. the child's day care participation) may have confounded the pattern of the data points.

The thorough description of the intervention and use of multiple data collection points and a trend line were strengths of the study. Limitations included mislabeling the study's design, lack of blinding during assessment, incomplete outcome measures, and lack of therapy details for replication. Thus, the conclusion that music therapy improved the joint attention skills of the participant had equivocal validity. The clinical importance of this single subject study, however, was compelling, as it measured joint attention after music therapy had been withdrawn. Future studies may use longitudinal research to statistically track the maintenance of joint attention skills over time in children with ASD.

Mixed Design

Reitman (2005) hypothesized that as a group and on an individual basis, the joint attention skills of 10