Abstract:
Autism Spectrum Disorder (ASD) is a pediatric neurodevelopmental disorder that affects multiple domains which include the social communication, behavioral, sensori-motor & cognitive domains. Currently, all the conventional and developmental approaches used in the treatment of autism focus primarily on addressing the core impairments within the social communication & behavioral domains. Interestingly, none of these interventions address the sensori-motor as well as clearly varying cognitive & functional abilities of the individuals with ASD. Therefore, there has been a growing interest in exploring & developing novel movement-based treatment approaches over the past few years. These approaches, which we will address as ‘Creative Movement Therapies’ (CMT) in our paper, include but, are not limited to music, yoga, dance, theatre & martial arts. CMT interventions are considered to be holistic in nature as they involve whole body movements & promote self-expression, creativity, improvisation & exploration through fun, play-based activities which help in keeping the children engaged in the treatment activities. In our review, we compare the evidence to date for different types of whole-body CMT in ASD. Our comprehensive literature review of several databases, revealed a total of 57 empirical articles (total N=1758) from 1994-2020 that evaluated the effects of music, dance, yoga, theatre & martial arts on multiple systems (sensorimotor, social communication, behavioral-affective, cognitive, function & participation) in individuals with ASD. We calculated quantitative effect size (ES) estimates for the outcome measures that were addressed in the reviewed papers, to evaluate & understand the clinical utility of CMT approaches in ASD. Overall, we found consistent & robust evidence that CMT led to medium to large improvements in social communication, behavioral & cognitive domains, whereas, there is limited positive evidence with varying ES of improvement in the sensorimotor, function & participation domains. Lastly, based on the reviewed literature, we provide guidelines for clinicians to incorporate CMT approaches in their plan of care for children with ASD.

Keywords: creative movement, music, dance, yoga, theatre, autism.