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## THE EFFICACY OF A GROUP COGNITIVE TRAINING FOR HIGH FUNCTIONING AUTISTIC CHILDREN

N. Taghva<sup>1,2</sup>, S. Bagherian Khosroshahi<sup>2,3</sup>, H. Pouretemad<sup>2,3</sup>

<sup>1</sup>Department of Psychology, Tarbiat Modares University, <sup>2</sup>Center for the Treatment of Autistic Disorders, <sup>3</sup>Department of Psychology, Shahid Beheshti University, Tehran, Iran Introduction: Cognitive impairments are partly associated with DSM-IV criteria for Autism. Cognitive studies in Autism posit domain-specific and domain-general deficits including Theory of Mind (ToM), Executive Function (EF), and Central Coherence (CC).

Objectives: Research indicates that early interventions for children with High Functioning Autism (HFA) predicate crucial cognitive gains.

Aims: The purpose of this study was to evaluate the effectiveness of a group cognitive training in increasing cognitive skills in children with HFA.

Methods: Four HFA children (2 girls, 2 boys) with mean age of 6.5 who had received intensive Applied Behavioral Analysis (ABA) participated in 18 group training sessions per week. Each session lasted 75 minutes, targeted ToM, EF, and CC using Art Therapy techniques. Picture Exchange Communication System (PECS), positive reinforcement, Token system and homework were used as well. All sessions were recorded. Session by session evaluation and parental attitudes were used to evaluate cognitive skills in this single subject design. ToM was tested by some stories and puppet shows. Problem solving tasks which were comprised of mental flexibility and planning assessed EF. visuospatial-constructional coherence and verbal-semantic coherence were explored by using pattern constructions and questions about the concepts of stories.

Results: All children improved significantly in cognitive skills especially in predicting emotional reactions in stories, EF, and visuospatial-constructional coherence; however some individual differences were considerable.

Conclusions: Group art-based cognitive training would be helpful for children with HFA to enhance their cognitive skills.