
THE EFFECT OF PHYSICAL EXERCISES ON SOCIAL AND COGNITIVE SKILLS OF AUTISTIC CHILDREN: A RANDOMIZED CONTROL TRIAL

M. Shayesteh far¹, A.H. Memari¹

¹Department of Sports Medicine, Neuroscience, Tehran, Iran

Introduction

In general, the large body of research for children with autism spectrum disorder (ASD) indicates that autistic children show profound impairment in socio-cognitive functions. So, strategies should be considered in intervention programs in order to decrease the socio-cognitive impairments in individuals with ASD.

Objectives

Although exercise activities can be presented in conjunction with social activities, there is few works examining a multilayer group exercise targeting a wide range of characteristics of ASD such as social and cognitive deficits as well as behavioral problems.

Aims

The purpose of this study was to investigate the effect of a 10 week social group exercise program (SGEP) on social abilities, attentional function and clinical character of children with ASD.

Methods

In a randomized, controlled trial, 30 high functioning autistic children and adolescents aged 7 to 14 years old were randomly allocated to either an experimental group that received SGEP or to a control group. Participants were evaluated for level of social skill (Autism Social Skill Profile), cognitive and attentional functions (Wisconsin Card Sorting Test) and clinical features (Autism Treatment Evaluation Checklist) before and after the intervention period.

Results

Results indicated that participants in experimental group showed significant improvement in social, attentional skills and clinical character but those in control group remained unchanged.

Conclusions

We concluded that physical exercise particularly those with social content have the potential for improving main problems of children with ASD and can be added as an essential part of their treatments alongside the conventional and behavioral intervention programs.