Self-regulated learning to improve daily activities and school task in children with autism spectrum disorders

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Introduction: Children with autism spectrum disorders commonly find daily activities and school tasks challenging. Limited interventions were found in these areas to address the needs of these children.

Objectives: To evaluate the effectiveness of self-regulated learning (SRL) and sensory integration intervention (SI) and compare it with a control activity-based intervention (AB) in improving daily living skills and school tasks in children with autism spectrum disorders.

Method: A three-armed randomised control trial was conducted. Sixty children; 20 in each group, with mild to moderate intellectual quotient participated in a 12-week intervention program. Assessments were conducted at pre and post interventions and at one month follow-up using the Vineland Adaptive Behavior Scales, 2\(^{nd}\) Edition (VABS-II) and School Function Assessment (SFA).

Results: Significant improvement was shown in the SRL group on daily activities and school tasks components in both assessments: VABS-II (\(p<0.001\)) and SFA (\(p<0.001\)). The SI group showed significant improvement in SFA (\(p<0.001\) to \(p\leq 0.05\)) but not in VABS-II (\(p=0.14\)). The control group (AB) also improved in SFA (\(p\leq 0.001\) to \(p\leq 0.03\)) but not in VABS-II (\(p=0.33\)). However, mean difference showed greater improvement on SI compared to AB. Follow-up results showed an ongoing improvement in the SRL group.

Conclusion: This study found that the SRL, SI and AB interventions are effective in improving daily activities and school tasks. The SRL was a promising intervention to enhance both daily activities and school tasks for children with autism spectrum disorder. SRL intervention should be considered in occupational therapy practice.