

Association of Sensory Processing and Cognitive Deficits in Children with Autism Spectrum Disorders - Pioneer Study in Saudi Arabia

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Abstract : Objective: The association between Sensory problems and cognitive abilities has been studied in individuals with Autism Spectrum Disorders (ASDs). In this study, we used a neuropsychological test to evaluate memory and attention in ASDs children with sensory problems compared to the ASDs children without sensory problems. Methods: Four visual memory tests of Cambridge Neuropsychological Test Automated Battery (CANTAB) including Big/Little Circle (BLC), Simple Reaction Time (SRT), Intra/Extra Dimensional Set Shift (IED), Spatial Recognition Memory (SRM), were administered to 14 ASDs children with sensory problems compared to 13 ASDs without sensory problems aged 3 to 12 with IQ of above 70. Results: ASDs Individuals with sensory problems performed worse than the ASDs group without sensory problems on comprehension, learning, reversal and simple reaction time tasks, and no significant difference between the two groups was recorded in terms of the visual memory and visual comprehension tasks. Conclusion: The findings of this study suggest that ASDs children with sensory problems are facing deficits in learning, comprehension, reversal, and speed of response to stimuli.

Keywords : visual memory, attention, autism spectrum disorders, CANTAB eclipse

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