The Effect Of The Base Computer Method On Repetitive Behaviors And Communication Skills

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Abstract : Introduction: This study investigates the efficacy of computer-based interventions for children with Autism Spectrum Disorder , specifically targeting communication deficits and repetitive behaviors. The research evaluates novel software applications designed to enhance narrative capabilities and sensory integration through structured, progressive intervention protocols Method: The study evaluated two intervention software programs designed for children with autism, focusing on narrative speech and sensory integration. Twelve children aged 5-11 participated in the two-month intervention, attending three 45-minute weekly sessions, with pre- and post-tests measuring speech, communication, and behavioral outcomes. The narrative speech software incorporated 14 stories using the Cohen model. It progressively reduced software assistance as children improved their storytelling abilities, ultimately enabling independent narration. The process involved story comprehension questions and guided story completion exercises. The sensory integration software featured approximately 100 exercises progressing from basic classification to complex cognitive tasks. The program included attention exercises, auditory memory training (advancing from single to four-syllable words), problem-solving, decision-making, reasoning, working memory, and emotion recognition activities. Each module was accompanied by frequency and pitch-adjusted music that child enjoys it to enhance learning through multiple sensory channels (visual, auditory, and tactile). Conclusion: The results indicated that the use of these software programs significantly improved communication and narrative speech scores in children, while also reducing scores related to repetitive behaviors. Findings: These findings highlight the positive impact of computer-based interventions on enhancing communication skills and reducing repetitive behaviors in children with autism.

Keywords : autism, narrative speech, persian, SI, repetitive behaviors, communication

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