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https://scholarworks.wmich.edu/cgi/viewcontent.cgi?article=1856&context=ojot

Article Overview:

This is a study evaluating the effectiveness of a computer-based versus a traditional activity/practice-based intervention for improving the visual motor abilities of children with autism. A sample of 34 preschool children aged 3 to 5 with autism and visual motor integration deficits were allocated to either a control condition or to one of the four intervention conditions: (1) a computer-based training, (2) a therapeutic practice intervention, (3) the combination of a computer-based training and therapeutic practice intervention, and (4) a martial arts exercise.

Sample: Children aged 3-5 with ASD and visual-motor integration difficulties

Key take home messages:

- Interventions were delivered by occupational therapists. The computer-based intervention involved using an educational computer software called 'Concepts on the Move' (includes learning about shapes, sizes, colours, etc). The traditional group involved engaging with activities such as playing with three-dimensional shapes, tracing objects, drawing shapes, cutting shapes, colouring shapes. The combined intervention involved a combination of all these activities. Children in the control group engaged in martial arts activities.
- 2. Both therapeutic practice (traditional therapy) and the combination of computer-based and therapeutic practice (traditional therapy) were found to be effective treatment strategies in improving visual motor abilities in preschool children with autism.
- 3. In this study, the computer-based treatment alone did not significantly increase children's visual motor abilities. The martial art intervention did not yield significant results either.
- 4. Authors suggest that computer-based treatment impact on visual motor skills is still insufficiently explored; more research is needed on its effectiveness when used alone.
- 5. **Recommendations**: clinicians might consider integrating both therapeutic practice and technology into their treatment with children with autism.