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**Behind mathematical learning disabilities: what about visual perception and motor skills?**

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Summary: In a sample of 39 children with mathematical learning disabilities (MLD) and 106 typically developing controls belonging to three control groups of three different ages, we found that visual perception, motor skills and visual-motor integration explained a substantial proportion of the variance in either number fact retrieval or procedural calculation. Furthermore, children with MLD performed significantly worse on visual perception, motor skills and visual-motor integration in comparison with age-matched control children. A mild developmental delay in visual perception, visual-motor integration and (fine) motor coordination and a severe delay in motor skills were found in children with MLD. However, not all children with MLD have problems on these domains. They seem to be a heterogeneous group, not only with respect to their mathematical profile but also with respect to their visual perceptual, motor and visual-motor integration skills. Diagnostic implications are discussed.

*Classification:* D70

*Keywords:* control groups; learning disabilities; young children; visual perception; developmental delays; psychomotor skills; sensory integration; mathematics skills; profiles

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