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**Enumeration skills in Down syndrome.**

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Summary: Individuals with Down syndrome (DS) exhibit various math difficulties which can be ascribed both to global intelligence level and/or to their atypical cognitive profile. In this light, it is crucial to investigate whether DS display deficits in basic numerical skills. In the present study, individuals with DS and two groups of typically developing (TD) children matched for mental and chronological age completed two delayed match-to-sample tasks in order to evaluate the functioning of visual enumeration skills. Children with DS showed a specific deficit in the discrimination of small numerosities (within the subitizing range) with respect to both mental and chronological age matched TD children. In contrast, the discrimination of larger numerosities, though lower than that of chronological age matched controls, was comparable to that of mental age matched controls. Finally, counting was less fluent but the understanding of cardinality seemed to be preserved in DS. These results suggest a deficit of the object tracking system underlying the parallel individuation of small numerosities and a typical – but developmentally delayed – acuity of the approximate number system for discrimination of larger numerosities.

*Classification:* F20 F30 C40 C90

*Keywords:* Down syndrome; numerical cognition; visual enumeration; numerical development; object tracking system; approximate number system; subitizing; counting

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