

## **Development of abilities and cognitive functioning.**

### **Comparison between children with mild mental retardation and children with specific learning disabilities.**

*Stella Giacomo<sup>1</sup>, Centra Stella<sup>2</sup>*

The aim of this research is to check whether typical academic skills such as reading, writing and calculation, are relatively independent from cognitive functioning.

To test this hypothesis, performance differences between subjects with specific learning disabilities (SLD) and those with mild mental retardation (MMR) were analyzed.

Subjects of the two experimental groups were recruited based on group assessment, which included 321 children from the 3° year of primary school.

In the first phase, the following tests were administered: a) “Culture fair” general intelligence test, b) Dictation of words and non-words, c) TRPS.

In the second phase, both groups were administered a battery of tests, including those on short-term verbal memory, visual attention, reading, mathematics, and other general trials, such as reading comprehension, problem solving, semantic trials, writing and naming.

Results showed that MMR subjects performed higher in reading, mathematics (storing of limited sequences), writing and naming than SLD subjects. On the contrary, SLD subjects performed better in TCM, mathematics (addition and subtraction), reading comprehension, problem solving and semantics than MMR subjects. Development of abilities, that is the possibility of acquiring an efficient operative control in the use of codes, did not seem to require any particular cognitive skill.

<sup>1</sup>*Università di Modena–Reggio Emilia, Centro di Neuropsicologia Clinica dell'Età Evolutiva di Pesaro*

E-mail: [neuropsicologia@asl1.marche.it](mailto:neuropsicologia@asl1.marche.it)

<sup>2</sup>*Centro di Neuropsicologia Clinica dell'Età Evolutiva di Pesaro*

E-mail: [stellace@inwind.it](mailto:stellace@inwind.it)