Effects of schooling on level of cognitive functioning and analogical reasoning modifiability

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Abstract
Examination of cognitive development of children has centered on performance testing. Less attention has been paid to learning potential measurements. In this paper we will present two studies focusing on relationship between chronological age, schooling and analogical reasoning. The aim of Study 1 was the delimitation of the effect of a year of schooling on the increase of analogical reasoning operation level from the effects of chronological age. In the specialty literature written on this topic there are contradictory data regarding schooling effects on performance in tests that measure the psychometric g. The aim of study 2 was to check the role of schooling, level of schooling and chronological age in determining the modifiability of analogical reasoning. The results show a major effect of schooling on metacognitive planning and a medium effect on analogical reasoning operational and functional level.

Keywords
Analogical reasoning, schooling, modifiability, metacognitive strategies, children 7-11 year

In the research of the relationship between the brain’s biological maturity and learning there is a major dilemma regarding the role these factors play in cognitive development (Piaget, 1947/2001, Vygotsky, 1978). According to Piaget (1947/2001) the cognitive development of cognitive processes is the result of biological maturization. In Vygotsky’s point of view cognitive development is primarily determined by social interactions. Feuerstein represents a third force in this debate with his cognitive modifiability theory. He was involved in the psychological assessment of immigrant children in Israel and found that children from different cultures perform very low on classic psychomet-