Relationship between the quality of children’s handwriting and the Beery Buktenica developmental test of visuomotor integration after one year of writing tuition

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Objective: We examined whether the three subtests of the Beery Buktenica developmental test of visuomotor integration predicted quality of handwriting across and within groups of boys and girls classified as proficient, at risk or non-proficient writers according to the Concise Assessment Scale for Children’s Handwriting.

Method: The Beery Buktenica developmental test of visuomotor integration and the Concise Assessment Scale for Children’s Handwriting tests were administered to 240 grade 2 children.

Results: Proficient writers scored better on the visuomotor integration subtest than non-proficient writers, while proficient and at risk writers scored better than non-proficient writers on the motor coordination subtest. No differences were found on the visual perception subtest. Girls were more often classified as proficient writers than boys, and they scored better on the motor coordination subtest. Across groups, regression indicated that gender and both the visuomotor integration subtest and the motor coordination subtest were significant predictors for the quality of handwriting (i.e., accounted for 17% of the variance). Conclusions: After one year of writing tuition, the visuo-motor integration subtest (and to a lesser extent the motor coordination subtest) but not the visual perception subtest significant relates to quality of children’s handwriting as measured with the Concise Assessment Scale for Children’s Handwriting. However, the relatively little variance explained also points to other abilities and/or task constraints that underlie quality of handwriting.