Balance and Gait in Children with Dyslexia

Moe-Nilson, R., Helbostad, J.L., Talcott, J.B. & Toennessen, F.E. (2003). Balance and gait in children with dyslexia. *Experimental Brain Research*, 150, 237-244.

This study investigated the ability of tests of standing balance and gait to discriminate between subjects who were good or impaired readers. Investigators were blind to subject's reading ability during balance and gait testing. The subjects were 22 children with dyslexia and 18 controls, all between the ages of 10 and 12 years. Walking tests at four rates of speed were completed on even and uneven surfaces. In addition, tests of standing balance were completed by examining perturbed and non perturbed body sway. The researchers found that tests of standing balance with eyes closed did not discriminate between the two groups; however, with eyes open, significant group differences were found. Tests with eyes open correctly classified 70 to 75% of the subjects. Walking speed also correctly classified 77-85% of the subjects on flat and uneven surfaces. The authors suggest that perhaps continuous scaled walking tests may be suitable as a component of a screening for dyslexia in the field.