

The Effect of Saccadic Training on Early Reading Fluency

Show all authors

[Danielle F. Leong](#), OD, [Christina L. Master](#), MD, [Leonard V. Messner](#), OD,

First Published May 1, 2014 Research Article

<https://doi.org/10.1177/0009922814532520>

[Article information](#)

Abstract

Background. Eye movements are necessary for the physical act of reading and have been shown to relate to underlying cognitive and visuoattentional processes during reading. The purpose of this study was to determine the effect of saccadic training using the King-Devick remediation software on reading fluency. *Methods.* In this prospective, single-blinded, randomized, crossover trial, a cohort of elementary students received standardized reading fluency testing pre- and posttreatment. Treatment consisted of in-school training 20 minutes per day, 3 days per week for 6 weeks. *Results.* The treatment group had significantly higher reading fluency scores after treatment ($P < .001$), and posttreatment scores were significantly higher than the control group ($P < .005$). *Conclusion.* Saccadic training can significantly improve reading fluency. We hypothesize that this improvement in reading fluency is a result of rigorous practice of eye movements and shifting visuospatial attention, which are vital to the act of reading.

Keywords [eye movements](#), [reading fluency](#), [saccades](#), [remediation](#)