

used to predict sustained clinical response and monitor gut health in infants.

URL: www.pediatrics.org/cgi/doi/10.1542/peds.2014-3330H

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A Systematic Review of Computer-Based Remedial Programs for Primary Schoolchildren Diagnosed With Dyslexia: Results From Medline

BACKGROUND AND OBJECTIVE: Dyslexia affects up to 15% of children and is the most prevalent learning disability. With information technology devices being common in the primary school classroom, advances in computer-based remedial programs offer potential benefits in helping dyslexic children improve their reading skills. However, a previous systematic review (Strong et al 2010) found that Fast ForWord, a commonly used computer-based program, gave no extra benefit. The objective was to determine whether computer-based programs provide significant benefits beyond traditional remedial programs in dyslexic primary schoolchildren.

METHODS: A systematic review was designed and conducted by using items from the Preferred Reporting Items for Systematic Reviews and Meta-Analyses statement. Medline was searched in July 2014 for controlled trials of computer-based programs involving primary schoolchildren aged 6 to 12 years, with no restriction on publication date or language.

RESULTS: After screening titles, abstracts, and full articles using preestablished inclusion and exclusion criteria, we included 6 studies in the review. The studies involved 605 children and were conducted in the United States (3), Finland (1), France (1), and the Netherlands (1) between 2008 and 2013. The studies were heterogeneous, studying various programs and therefore precluding meta-analysis. Two studies included Fast ForWord, and both studies showed no significant benefit. The Finnish study tested their self-developed software, GraphoGame, and found significant benefits in all tested outcomes in the study group. The French group also tested a self-developed computer-based program (developed by Magnan et al 2004) and found that the experimental group progressed significantly more than the control group in all subsets of reading tests. The Dutch study also showed significant results of their computer-based program, with the study group achieving the reading ability of nondyslexic children. Another US group used 2 computer-based programs (RWT, Herron 1995, and LIPS, Lindamood and Lindamood 1998) in their study. They found that the experimental group gained significant progress compared with the control group.

However, the computer-based programs were supplementary to teacher-led instruction, and the study did not provide a specific control for the computer-based programs.

CONCLUSIONS: Although there are studies suggesting that computer-based programs offer benefits to dyslexic schoolchildren beyond traditional interventions, the evidence is far from conclusive. More controlled trials are needed to assess effectiveness of computer-based programs. Fundamentally, a more coordinated effort among researchers is needed to develop effective computer-based programs to assist dyslexic children.

URL: www.pediatrics.org/cgi/doi/10.1542/peds.2014-3330I

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The Effect of a Modular Education Program Related to Children With Epilepsy and Their Parents on Disease Management

BACKGROUND AND OBJECTIVE: Epilepsy is chronic neurologic disease and affects both the child with epilepsy and his or her family. We conducted a randomized controlled trial to evaluate the effect of a modular education program on disease management for children with epilepsy and their parents.

METHODS: This study was conducted at the Child Neurology Polyclinic of Akdeniz University Hospital in Turkey between February 2014 and June 2014. For both experimental ($n = 42$) and control ($n = 50$) groups, children 7 to 18 years old with epilepsy and their parents were included in the study. Both parents and children provided informed consent. The content of the modular education program used in the study was developed as a result of an extensive literature review. The intervention was given to children with epilepsy and their parents through interactive teaching methods. Before and after the program, data related to the children in experimental and control groups were collected by a researcher using the Epilepsy Knowledge Test for Children in face-to-face interviews. Data for parents were collected on a family information form.

RESULTS: After the modular education program, mean scores on the knowledge test increased in the children and their parents in the experimental group and decreased in the children in the control group. The differences between the mean scores of these groups were statistically significant ($P < .001$). Also, after the modular education program, the children and their parents interviewed in the experimental

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Pediatrics 2015;135;S6
DOI: 10.1542/peds.2014-3330I

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The online version of this article, along with updated information and services, is located on the World Wide Web at:

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