

AOTA Evidence Briefs

Attention Deficit/Hyperactivity Disorder

*A product of the American Occupational Therapy Association's Evidence-Based Literature Review Project

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Massage therapy benefits adolescents with ADHD

Field, T. M., Quintino, O., Hernandez-Reif, M., & Koslovsky, G. (1998). Adolescents with attention deficit hyperactivity disorder benefit from massage therapy. *Adolescence*, *33*, 103–108.

Level: IA1a

Randomized control trial, 20 or more participants per condition, high internal validity, high external validity

Why research this topic?

The typical treatments for attention-deficit/hyperactivity disorder (ADHD) in youngsters have been drugs and behavior modification. Both are effective only while they are being administered, and drugs have occasional side effects. Youngsters might benefit from alternative treatments.

What did the researchers do?

Field and her colleagues (1998), all affiliated with the University of Miami (Florida), investigated the effects of massage therapy and relaxation therapy on adolescents with ADHD. They recruited 28 youngsters from self-contained classrooms for emotionally disturbed adolescents. All were boys who had been diagnosed with ADHD according to the criteria of the *Diagnostic and Statistical Manual of Mental Disorders* (3rd ed. rev.). They averaged 14.6 years in age.

The researchers randomly assigned the boys to massage therapy or relaxation therapy, ensuring that the resulting groups would be equivalent on background variables such as socioeconomic status. The massage therapy group received a 15-minute massage after school for 10 consecutive school days. "The massage consisted of moderate pressure and smooth strokes for 5 minutes in each of three regions: up and down the neck, from the neck across the shoulders and back to the neck, and from the neck to the waist and back to the neck along the vertebral column" (p. 105).

The relaxation therapy group received a 15-minute relaxation session on the same schedule as the massage therapy group. The therapist asked the boys to tense and relax the same body parts that were addressed in the massage therapy.

The outcome areas of interest were *happiness* (as measured by the Happy Face Scale); *fidgeting* (as measured by a 3-point scale); *self-reported depression* (as measured by the Center for Epidemiologic Studies Depression Scale); *self-reported empathy* (as measured by the Empathy Scale); time on task (as observed by teachers); and *behavior* (as observed by teachers and as measured by the Hyperactivity subscale of the Conners Teacher Rating Scale). The first two areas were measured before and after the therapy sessions. The last three were measured on the first day (presumably before treatment began) and on the last day.

What did the researchers find?

From before the sessions to after, the massage therapy group selected significantly happier faces on both the first and the last day of treatment. Further, the massage therapy group demonstrated significantly less fidgeting on those 2 days.

From the first day to the last, the massage therapy group averaged significantly more time on task and received significantly better scores for behavior.

What do the findings mean?

For therapists and other providers, the findings suggest that massage therapy has positive effects on adolescents with ADHD, making them feel happier, reducing their fidgeting, increasing their time on task, and improving their behavior. It "could become an important tool in the management of ADHD" (p. 107)—as an enhancer of, a complement to, or a substitute for currently used therapies.

What are the study's limitations?

The relaxation therapy may have been perceived as "hard work" by the subjects compared with massage therapy (as reported by some of the adolescents) and so simply not enjoyed as much.

■ Terminology used in this document is based on two systems of classification current at the time the evidence-based literature reviews were completed: *Uniform Terminology for Occupational Therapy Practice—Third Edition* (AOTA, 1994) and *International Classification of Functioning, Disability and Health (ICIDH-2)* (World Health Organization [WHO], 1999). More recently, the *Uniform Terminology* document was replaced by *Occupational Therapy Practice Framework: Domain and Process* (AOTA, 2002), and modifications to *ICIDH-2* were finalized in the *International Classification of Functioning, Disability and Health* (WHO, 2001).

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For more information about the Evidence-Based Literature Review Project, contact the Practice Department at the American Occupational Therapy Association, 301-652-6611, x 2040.

