



## Press Release

### **Cognitive-behavioural therapy particularly efficient in treating ADHS in adults**

**Psychologists at the University of Tübingen conduct study to test different types of therapy**

**Dr. Karl Guido Rijkhoek**  
Director

**Antje Karbe**  
Press Officer  
Phone +49 7071 29-76788  
+49 7071 29-76789  
Fax +49 7071 29-5566  
karl.rijkhoek[at]uni-tuebingen.de  
antje.karbe[at]uni-tuebingen.de

[www.uni-tuebingen.de/aktuell](http://www.uni-tuebingen.de/aktuell)

Tübingen, 8/21/2017

Cognitive-behavioural therapy (CBT) group training was shown to achieve the same results as neurofeedback training in treating attention-deficit hyperactivity disorder (ADHD). Both methods led to a comparable decrease in symptoms. CBT, however, proved to be generally more efficient, concluded Dr. Michael Schönenberg and his team at the Department of Clinical Psychology and Psychotherapy at the University of Tübingen. Their statement is based on the results of a comparative study of different types of therapy carried out with adult test subjects. The results have been published in the professional journal *The Lancet Psychiatry*.

Attention-deficit hyperactivity disorder (ADHD) is a mental illness that already begins in childhood or young adulthood. In sixty percent of the cases, it continues into adulthood and can lead to difficulties in professional and private life. Those confronted with it tell of symptoms such as impulsiveness, low stress tolerance, inner restlessness and compulsion. Along with these come difficulties in planning and organization as well as the inability to concentrate on a single task for longer periods and follow it through to completion. These symptoms can be treated well with medication, yet similar successes have been reported for non-pharmacological types of therapy.

One of the most controversial types of therapy is what is known as neurofeedback, in which patients learn to control their brain activity patterns selectively, and in this way achieve an alleviation of their symptoms. Previous studies have conclusively shown that ADHD symptoms could actually be reduced after this type of training. But it is nevertheless debatable if the improvement was actually attributable to the specific effect of the training or if it was more likely caused by a non-specific placebo effect.

In the current study, Tübingen psychologists worked in cooperation with researchers from the Bamberg, Bayreuth and Budapest to compare neu-

rofeedback training, sham neurofeedback (placebo) training in which the participants did not have their own brainwaves fed back to them, and a CBT group program, in which, among other things, specific strategies for planning actions, improved time management and stress mitigation techniques were practiced. During a 15-week period, 118 adults with ADHD symptoms received either 30 neurofeedback sessions or 15 sham neurofeedback sessions followed by 15 neurofeedback sessions. Over 12 weeks, another group received a total of 12 CBT group therapy sessions. Changes in the severity of symptoms were compared in objective tests of ability to concentrate and underlying brain wave patterns. There were four measurement periods ranging from before the start of intervention to six months after training had ended.

The researchers reported results that indicated neurofeedback intervention was not superior to sham neurofeedback. Both types of training showed good efficacy, they said, yet it could not be demonstrated that neurofeedback has a specific effect on brain waves. Project leader Michael Schöenberg said that CBT group therapy also led to a comparable reduction in symptoms. He added, "The method was considerably less involved as well. Among other things, it requires fewer sessions. And instead of training each individual, group work is possible. Plus there are no additional costs such as creating and maintaining technical equipment." He summarized, "The results of our study show that CBT approaches are very effective and efficient in treating ADHD symptoms in adults. Before other methods for the therapy can be recommended, these must first demonstrate they are superior to standard, CBT methods."

**Publication:**

Michael Schöenberg, Eva Wiedemann, Alexander Schneidt, Jonathan Scheeff, Alexander Logemann, Philipp M. Keune, Martin Hautzinger: Neurofeedback, sham neurofeedback, and cognitive-behavioural group therapy in adults with attention-deficit hyperactivity disorder: a triple-blind, randomised, controlled trial. *The Lancet Psychiatry*, Published Online, August 9, 2017  
[http://dx.doi.org/10.1016/S2215-0366\(17\)30291-2](http://dx.doi.org/10.1016/S2215-0366(17)30291-2)

*The Lancet Psychiatry* Podcast: <http://www.thelancet.com/journals/lanpsy/onlineFirst>

**Contact:**

PD Dr. Michael Schöenberg  
University of Tübingen  
Department of Clinical Psychology  
Telephone: +49 7071 29-78355  
[michael.schoenberg@uni-tuebingen.de](mailto:michael.schoenberg@uni-tuebingen.de)