

## SUMMARY

Many youngsters in (forensic) child- and adolescent psychiatry suffer from multiple disorders which makes their treatment rather complex. A disorder which needs special attention is ADHD. At this moment, interventions often fail because the underlying problems of the disorder are not taken into account. An effective intervention for this group of youngsters might be neurofeedback. Neurofeedback intends to influence the (dys)regulation in the brain. Hence, the ability for the youngsters to control their own behaviour should ameliorate which in turn might improve adherence of the youngsters to therapy and increase treatment effectiveness.

In this pilot study, two main research questions are investigated: (a) Is neurofeedback a feasible intervention for this target population and (b) is there a relevant clinical change for sustained and divided attention? The conclusion is that the intervention is feasible but not uncomplicated. The success of the intervention depends on the effort of the trainers and the ability of the brain to adapt the activation patterns. After the intervention, most youngsters show an improvement on divided attention and they are more capable of ignoring irrelevant stimuli.