

Cogmed Working Memory (WM) Training Program:

Cogmed WM training is a computer based solution for attention problems caused by poor working memory. Typically, individuals with poor working memory difficulties share the following profile:

- Reserved in group activities
- Poor academic progress in reading and mathematics
- Difficulties with following instructions
- Problems with learning activities that requires both storage and processing
- Appear to be inattentive, to have a short attention span and to be distractible

The training consists of a specific set of working memory tasks that are performed on a computer, where the difficulty level is adjusted according to individual ability. The users complete, 25 sessions – 5 days per week for 5 weeks taking 30 - 45 minutes per session. A disturbance free environment is important for successful training.

The standard program includes:

- Initial interview with the Coach
- Start-up session
- 5-8 weeks of online training with weekly Coach calls
- Wrap-up meeting
- Six month follow-up interview
- Access to the Cogmed Training Web to monitor progress
- Optional Cogmed Extension Training (12 months)

We provide pre and post measures of working memory to gain a base line of your child's working memory abilities prior to the commencement of the program and a measure of working memory abilities a month after the program has been completed.

What outcomes can you expect?

Significant changes are reported in 8 out of 10 children who follow the program. That is consistent across the majority of studies and in clinical reporting. When you strengthen working memory, you improve the *capacity* to focus and learn and this creates an *opportunity* to improve functional outcomes. The best outcomes occur when the child applies these new skills to new challenges after training.

There are a number of factors that contribute to the training outcomes:

The design of the training is based on sound neuroscience principles. The exercises are specific to working memory. The order, intensity and variety of exercises is highly structured to maximise the effectiveness of training and keep children and adolescents engaged. The program automatically adjusts the challenge level prompting individuals to train at the right level for their needs: hard enough to promote change, rewarding enough to keep on going.

Our Cogmed WM coaches will prepare your child for training by setting realistic and achievable goals and supporting you throughout the entire process.

Parents and caregivers can really help by encouraging their child to complete their exercises as per the agreed timetable, in a low distraction environment, providing positive feedback and rewards for trying their hardest.

To hear what other parents are saying, take a look at some user stories on the website:

www.cogmed.com.au/user-stories

Research:

Cogmed Working Memory Training exercises your working memory. Leading researchers state that the human brain is more plastic than previously believed and research at the Karolinska Institute in Stockholm, Sweden has shown that when you train your working memory, activity in those parts of the brain that are associated with WM increases (Nature Neuroscience, 2004). Almost all the research that has been conducted in this area has been performed using Cogmed Working Memory Training. Various studies have shown that you can improve your WM by up to 20% by training it. But not only does it improve WM the improvements translate to other functions that are closely associated with WM and executive functioning. For example:

- Non verbal problem solving
- Impulse control
- Reading comprehension
- Mathematical problem solving
- Concentration
- Stamina during mentally demanding tasks

After having completed the WM training, children, adolescents and adults have reported that they find it easier to concentrate, that they are more successful in school related tasks and that they find it easier to remember things.

For further information visit the Cogmed website www.cogmed.com