



Attention Training Programme for Children



Cogo is a digital attention
training programme for ages 6-12,
using neurofeedback with a non-invasive
Brain-Computer Interface (BCI) game.



Our Solution

Cogo is a patented, scientifically validated game-based digital therapeutic programme that aims to effectively improve children's attention abilities. The technology is based on Brain-Computer Interface (BCI) and jointly developed by A*STAR's Institute for Infocomm Research (I²R), Institute of Mental Health, and Duke-NUS Medical School in Singapore.

Researchers have demonstrated, in various clinical trials, Cogo's efficacy. A randomised clinical trial involving 172 children with inattentive tendencies showed significant improvements and is supported by Functional Magnetic Resonance Imaging (fMRI) brain scans, results of which were published in the prestigious journal "Nature-Translational Psychiatry".

Brain scans showed positive post-training effects observed in areas associated with attention. In a more recent trial using Cogo in home-based settings, clinicians likewise observed overall improvements in 78% of children with ADHD.

Proven Effective in Over 10 Years of Clinical Trials



A randomized controlled trial of a brain-computer interface based attention training program for ADHD

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Qian et al. *Translational Psychiatry* (2018) 8:149
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Psychiatry**

ARTICLE

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Brain-computer-interface-based intervention re-normalizes brain functional network topology in children with attention deficit/hyperactivity disorder

Xing Qian, Beatrice Rui Yi Loo, Francisco Xavier Castellanos, Siwei Liu, Hui Li Koh, Xue Wei Wendy Poh, Ranga Krishnan, Daniel Fung, Michael WL Chee, Cuntai Guan, Tih-Shih Lee, Choon Guan Lim and Juan Zhou

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Child and Adolescent Psychiatry and Mental Health

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Home-based brain-computer interface attention training program for attention deficit hyperactivity disorder: a feasibility trial

[Choon Guan Lim](#) , [Chui Pin Soh](#), [Shernice Shi Yun Lim](#), [Daniel Shuen Sheng Fung](#), [Cuntai Guan](#) & [Tih-Shih Lee](#)





Game Activities

Through BCI, the participant moves the avatar according to his level of focus. With more focus, the faster the avatar moves. The participant can also tap on the on-screen controls to activate other movements such as jumping and turning. These movements are essential to fulfilling the objectives of the game activities.

Recommended Duration



24 Sessions
in 3 months



2 to 3 Sessions
per week

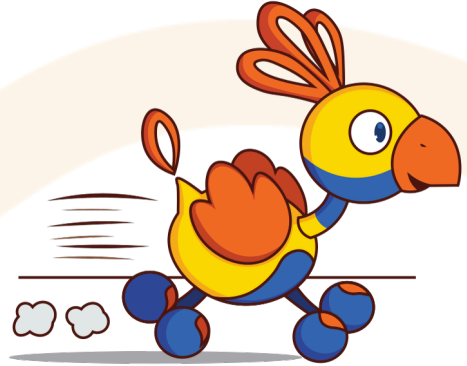


30-45 Minutes
per Session

Three Types of Attention in Three Levels

Basic

Participants are trained **Sustained Attention** as they focus on the avatar for it to run as far as possible.



Intermediate

In this level, the objective is to train **Selective Attention** by letting participants collect as many fruits as possible from a given list while still maintaining focus.

Advanced

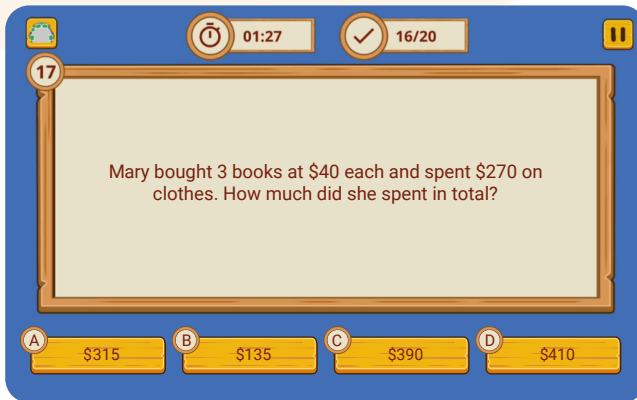
Similar to the Intermediate level, the participant now has to collect as many fruits as possible, but in the correct sequence, thereby training **Inhibition Control**.



Transfer Effects

Cogo incorporates real-world activities to ensure that trained attention skills transfer effectively to children's daily life.

The child's attention is measured in real-time during these activities to validate the effectiveness of the Cogo training program.



MCQ Quiz

Each multiple-choice quiz consists of 10 Language and 10 Mathematics questions.

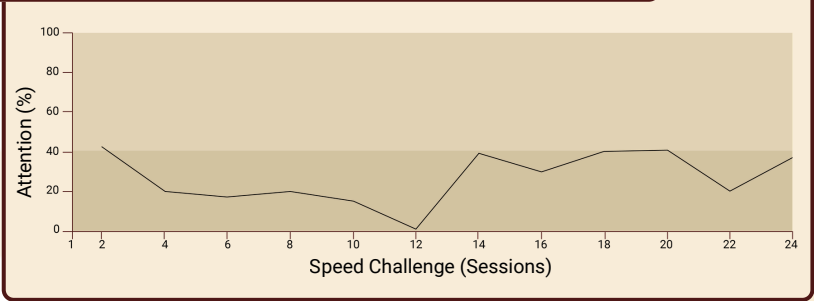
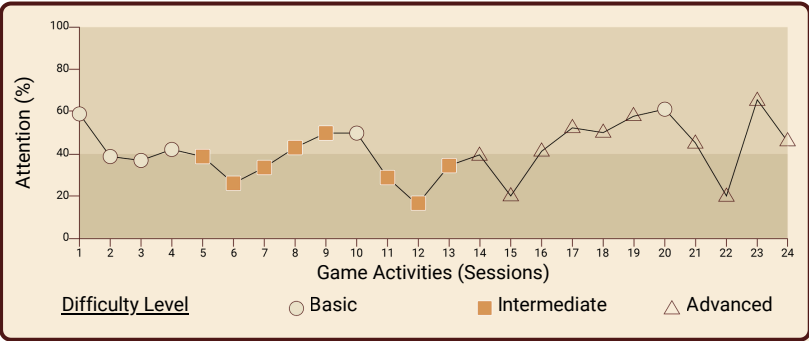
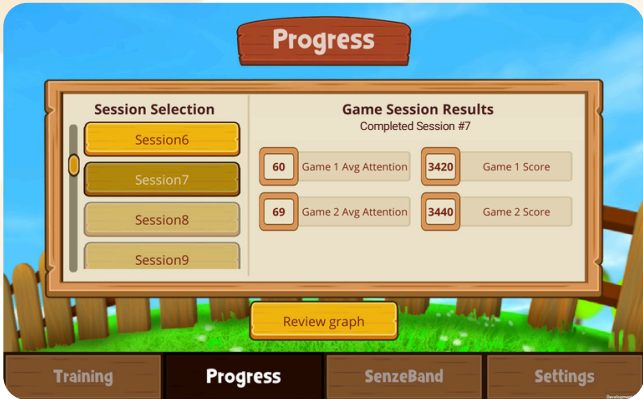
Speed Challenge

This segment assess participants' reaction time and accuracy while incorporating frequent breaks to help participants reset their alertness.



Training Progress

The progress menu allows participants to compare their performance across various sessions, helping them to understand their progress and areas for improvement.



Contact Us

We take pride in our ability to change the lives of people.

Scan this QR code to get in touch with us now!



Cogo Partner:

