

Cogset

Cognitive assessment in virtual reality

Health care and education professionals frequently face the need to assess a child's cognitive performance for various purposes. In current practice, cognitive assessments are mainly based on paper-and-pencil methods and visual observation of children's behavior. These approaches are labor-intensive and highly dependent on the availability of personnel with special expertise. We have developed a novel method for automated and resource-saving testing of cognitive functions in children in virtual reality environments. Cogset tracks children's eye and hand movements while they perform cognitive tasks presented on a VR glass screen. The tracking system is integrated with validated data analysis algorithms to allow for automated, quick and effortless visualization of performance metrics for utilization by professionals conducting neuropsychological screening and evaluations.



Susanna Stjerna, MA (psych)
Helsinki University Children's Hospital

Susanna specializes in neuropsychology and is a PhD student in neuroscience. Her clinical work focuses on clinical neuropsychological assessments of children in Helsinki University Children's Hospital. She manages the search and development of the cognitive test solutions for Cogset.



Jukka Leppänen, PhD
Director, Infant Cognition lab, Tampere University

Jukka has spent most of his career studying early child development in research settings in the USA (Minnesota and Harvard) and Finland (Tampere University). His current work focuses on neurodevelopmental bases of high-cost behavioral problems in children.



Sampsa Vanhatalo, MD
Professor of clinical neurophysiology, Helsinki University Children's Hospital

Sampsa has expertise in pediatric clinical neurophysiology, as well as development and commercialization of medical devices.

SPARK VALUE: We hope the SPARK program will help us in developing our technology towards a versatile and widely applicable solution for cognitive assessment. Through SPARK, we hope to find contacts and partners who have expertise in commercial utilization of diagnostic technologies and can help us in identifying the relevant market, IP and regulatory questions.