## Abstract for the Danish symposium at Nordic Meeting in Neuropsychology 2024

- organized by Danish Neuropsychological Society and Danish Child Neuropsychology Society

## **General information**

**Responsible for the symposium:** Laila Øksnebjerg, PhD, Associate professor, Department of Psychology, University of Copenhagen

**Title of the symposium:** Technology-based interventions in treatment and rehabilitation – how to promote uptake, effect, and sustainability.

**Chair:** Laila Øksnebjerg (see above).

## Presenters and title for each presentation:

Lars Evald, PhD, Head of Neuropsychological Research, Hammel Neurorehabilitation Centre and University Research Clinic Central Denmark Region

Title of presentation: Virtual Reality Assessment and Treatment of Spatial Neglect

Julie Ertman Nørkær Lundsgaard, PhD Student, Department of Psychology, University of Copenhagen, Denmark

<u>Title of presentation:</u> App-based memory control training in children and adolescents

Per Trads Ørskov, PhD, Postdoc, Research Unit for Digital Psychiatry (READI), Centre for Digital Psychiatry, Region of Southern Denmark, Denmark

<u>Title of presentation:</u> Virtual reality for anxiety disorders (VR8) – improving treatment interventions using technology

Laila Øksnebjerg, PhD, Associate professor, Department of Psychology, University of Copenhagen <u>Title of presentation</u>: Design, implementation, and sustainability of cognitive support technology for people with dementia

## **Brief description of symposium**

The use of technology-based tools and methods in treatment and rehabilitation of neuropsychiatric and neurological conditions is rapidly expanding. Many research projects show promising results, but often face challenges when it comes to implementation in professional practice and daily life of end-users. The overarching theme of this symposium is how we, based on expertise from various clinical research perspectives, can promote uptake, effect, and sustainability of technology-based interventions in treatment and rehabilitation. This theme will be discussed based on perspectives from four different research project. First, results from a proof-of-concept study on the use of virtual reality in assessment and treatment of spatial neglect in right-hemisphere stroke patients will be presented. The second talk present results from the first validation study of AMEMO project. The aim of this project is to investigate whether app-based memory control training improves mental health in children and adolescents with anxiety and affective disorders. Thirdly, results from the VR8 project will be presented. In this RCT the effect of individually

adapted exposure therapy in virtual reality, as part of cognitive behavioural therapy, is compared to cognitive behavioural therapy with exposure in vivo. Finally, results from the ReACT project will be presented. This research project investigated co-design and user-centred implementation of an app-based technology for cognitive support of people with dementia.

The symposium will end with a discussion on shared themes and perspectives on the uptake, effect, and sustainability of such technology-based interventions in treatment and rehabilitation of various neuropsychiatric and neurological conditions.